PERCEIVED EFFECTS OF EXTRA TUITION ON ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS MATUNGULU SUB-COUNTY MACHAKOS COUNTY

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DECLARATION

This research project is my original work and to the best of my knowledge has not been presented for the award of a degree in any other university.

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DEDICATION

This work is dedicated to my husband; David Mutua, our children; Stella, Diana, Sharon, Faith and Joshua.

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ABBREVIATIONS AND ACRONYMS

AGM Annual General Meeting

EFA Education for All

KSSHA Kenya Secondary Schools Heads Association

KCSE Kenya Certificate of Secondary Education

KICD Kenya Institute of Curriculum Development

KNEC Kenya National Examination Council

MOE Ministry of Education

MOEST Ministry of Education, Science and Technology

NACOSTI National Commission for Science, Technology and Innovation

PTA Parents Teachers Association

QASO Quality Assurance and Standards Officer

SPSS Statistical Packages for Social Sciences

TSC Teachers Service Commission

UNESCO United Nations Educational, Science and Cultural Organization

ABSTRACT

The practice of extra tuition is a phenomenon which has prevailed in Kenyan schools despite the repeated ban by the government. The purpose of the study was to establish the perceived effects of extra tuition on academic performance in Matungulu Sub-County, Machakos County. Descriptive survey design was used for the study. 10 schools (representing 30% of the population) were randomly sampled for this study. A total of 250 respondents participated in the study. They included 10 principals (representing 30% of all the principals), 40 teachers (representing 10% of the total number of teachers), 160 students (representing 10% of all the students' population) and 40 parents (representing 2% of all the parents available). There was 100% response rate. Questionnaires were used as instruments for data collection. Statistical Package for Social Sciences (SPSS) was used to analyze the data. All the null hypotheses were tested using the t-test for independence of means at a 0.05 level of significance. The analyzed data was presented in form of frequency tables, bar graphs, and pie charts. The study found that extra tuition is widely practiced in the schools studied. This was evidenced by the fact that 90% of the student respondents reported that extra tuition is offered in their schools. Regarding the decisions to have tuition, 52.5% of the students reported that extra tuition decisions are made by teachers. It was found out that 82% of the students, 85% of the teachers and 80% of the principals supported extra tuition. Some reasons advanced for the support of extra tuition were that it helps in early coverage of syllabus, in revision, to occupy students constructively, boosts the performance of individual students and to identify needs of individual learners among others. Observed t value revealed by the study indicated that perception scores of teachers and students were t (198) = -0.767, p=0.444, perception scores of teachers and principals were t (48) = -0.593. p=0.556 while perception scores of teachers and parents were t (78) = -0.848, p=0.556. This meant that statistically, there was no significant difference between the perception scores of students, teachers, principals and parents concerning extra tuition on academic performance. Among the key recommendations, were that there is need for the government to provide adequate educational resources like more teachers and textbooks and to reduce syllabus content to manageable levels. On areas for further research based on the findings of the study, there is need to find out if there is any relationship between extra tuition and academic performance.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is defined as an activity that involves the understanding of principles as well as the acquisition of information or skills. It involves the whole personality in that an educated man is one whose form of life, as exhibited in his conduct, the activities to which he is committed, his judgments and feelings, is thought to be desirable (Shiundu and Omulando, 1992). Shiundu and Omulando notes that education aims at providing men and women with a vocational training that will enable them to be self reliant. They further argue that education puts men and women in touch with, and train them to appreciate cultural and moral achievement of men.

Investment in education therefore plays a significant role in human development through empowerment of people to improve their wellbeing and participate actively in nation building (Nafula, 2002). The World Bank (1980) observed that education has been recognized as a central element in national development. UNESCO (1960) recognizes access to education and possession of basic education as a human right (Article 26).

The 2000 World Education for All (EFA) frameworks in Dakar, Senegal declared improvement in all aspects of education and improvement of recognized and measurable learning outcomes, especially in literacy, numeracy and essential life skills. Education is therefore a recipe for civilization and a source of wealth and power which are vital for growth and development of any country's economic and political institutions.

The concept of extra tuition is a practice which is said to enrich the academic ability of learners in the hope of sharpening their preparedness for the national examination (Wanyama and Njeru, 2003). It is said to have been a major common phenomenon since the 1960s in some parts of East Asia particularly in Japan, the Republic of Korea and Taiwan (Hallack and Poisson, 2007). Hallack and Poisson further observed that, extra tutoring centers in Australia were catering for children as young as three years of age.

The Australian national government introduced vouchers to fund private tutoring for students who fell behind national achievement benchmarks in literacy and numeracy, thus subsidizing the role of extra tutors in providing remedial education. According to Bray (2003), one-third of the pupils in Egypt were said to receive regular private extra tuition. This figure, however, varied from one society to another in the country. As such, it was argued that tutoring in the country had reached the extent of being regarded as a universally accepted phenomenon.

Elsewhere, Paviot (2008) estimates that about 79.7% of grade six students in Malawi receive extra tuition. This is out of the need to improve learners' performance in national examinations. Extra tuition may have positive outcome in improving students learning, providing students with constructive activities and enabling them to complete syllabus in time (Yiu, 1996). It's a forum of employment to those offering extra tuition services and helps students understand mainstream lessons (Ireson and Rushforth, 2005).

Extra tuition enables learners to access extra attention, ensures improved learning styles, improved performance, personalized relationship and involvement of Parents as they keep track of the performance of their children (Makworo, 2012). In Kenya extra tuition phenomena started after 1985 when the 8-4-4 system of education was introduced to replace the then 7-4-2-3 system(Wanyama and Njeru,2004) .The two year advanced level syllabus was phased out and compressed with the current four years of ordinary level.

With the introduction of the 8-4-4 system of education, the subject matter that used to be completed in six years secondary schooling was now to be covered in four years. According to Wamaihu (1989), teachers in government schools where overwhelmed by the huge content of work to be completed in a shorter time. The study further observed that private schools came up with advertisements in towns, churches; social and other public places committing themselves to cover the syllabus within four years and have students pass highly.

The situation compelled parents to send their children to private schools to be taught privately during the holidays and weekends in addition to the government term schedules (Wamaihu, 1989). The Kenya Certificate of Secondary Education (KCSE) results of 1989 released by the Kenya National Examination Council (KNEC) in February 1990 showed that 58% of the candidates who sat for the examinations scored below average. This was an indication that the

candidates where inadequately prepared for the national examinations because of syllabus content being too high and students being unable to read, understand and internalize the content of ten compulsory subjects.

Similarly, the KCSE results of 2010 released by the KNEC in February 2011 showed that only 27% of the candidates scored mean grades of C+ and above which is the minimum requirement for admission for both private and public universities (Ongeri, 2011). The demand for higher grades in the National Examinations influenced secondary schools to start holiday tuition. Some head teachers sought the consent and support of parents during the annual general meetings (AGM) to offer holiday tuition.

For some time the trend was left to spread country wide without government control. A study conducted by (Kariuki, 2011) found out that with the completion of the syllabus in the month of March of the examination year, followed by programmed, guided and supervised holiday revision, candidates were capable of scoring higher mean grades.

The report of the Task Force on students discipline and unrests in secondary schools (Nzomo, Kariuki and Guanti, 2001) found out that most households where unable to afford to pay school fees and high costs of learning and teaching materials for their children because of poverty. Therefore extra expenses for extra tuition made it difficult for households to educate their children. The report recommended that the MOE withdraw extra tuition for all primary and secondary school students. This was attributed to the high cost of Education worsened by the burden of cost sharing which had a negative impact on access, equity and quality of education in Kenya.

The Ministry of Education in Kenya banned extra tuition in 1988 and repeated the same in 2008 in a circular MOE/GEN/G1/11/4 signed by Karega Mutahi who was the permanent secretary in that ministry. The Basic Education Act (2013), section 37(1) states that no pupil shall be subjected to holiday tuition. Any person who contravenes the law is liable to a fine not exceeding KSh100, 000 or one-year imprisonment or both. Conducting private tuition in private premises is also a crime, according to the Teachers Service Commission (TSC) code of conduct and ethics.

1.2 Statement of the Problem

The practice of extra tuition in Kenya has been the cause of disharmony between the Ministry of Education, Science and Technology (MOEST) and the Kenyan teachers. When issuing a ban on holiday tuition in 2012, the then Education Minister, Mutula Kilonzo felt that teachers should be able to complete the syllabus and prepare students for national examinations within the given term periods (KSSHA, 2012).

His statement caused mixed reactions among various stakeholders. For example, teachers felt that remedial teaching was necessary to complete syllabus due to the overloaded curriculum and also bring on board slow learners in order to help them compete with fast learners for the limited university places. These reactions indicate a conflict of interest which needs to be addressed. This study sought to establish perceived effects of extra tuition on academic performance in public secondary schools in Matungulu Sub-County by students, teachers, parents and school principals.

1.3 Purpose of the Study

The purpose of this study was to establish perceived effects of extra tuition on academic performance in public secondary schools in Matungulu Sub-County.

1.4 Objectives of the Study

The general objective of this study was to establish the perceived effects of extra tuition on academic performance in public secondary schools in Matungulu Sub-County.

The specific objectives of the study were to:

- i. Determine whether the perceived effect of extra tuition on academic performance by students differ from that of teachers.
- ii. Establish whether the perceived effect of extra tuition on academic performance by teachers differ from that of school principals'.
- iii. Establish whether the perceived effect of extra tuition on academic performance by parents differ from that of teachers.

1.5 Hypotheses of the Study

This study was guided by the following hypotheses:

- i. Students' perception of extra tuition on academic performance does not significantly differ from that of teachers'.
- ii. There is no statistically, significant difference between the teachers' perception of extra tuition on academic performance and that of school principals'.
- iii. There is no statistically, significance difference between parents' perception of extra tuition on academic performance and that of teachers'.

1.6 Significance of the Study

The study was set out to establish perceived effects of extra tuition on academic performance by students, teachers' school principals and parents in Matungulu Sub-County. It was expected that once the research was completed the effect of extra tuition on academic performance would be understood and the findings applied to enhance better understanding of the concept. The outcome of the research would be useful to educational policy makers, planners and implementers in guiding the nation towards making necessary adjustments and decisions on the practice of extra tuition in the Kenyan educational institutions.

The Government and policy makers would find the study invaluable in implementing appropriate administrative strategies with the aim of helping secondary school students to benefit and regain faith in mainstream learning and improve efficiency of educational investments and resources. The results would also enable other stakeholders namely parents and sponsors to ascertain if extra tuition has effects on academic performance and therefore forge a way forward.

1.7 Delimitation of the Study

The study involved school principals, teachers, parents' and form three (3) students who willingly and voluntarily participated in the exercise. The study was only carried out in public secondary schools in Matungulu Sub-County, in Machakos County.

1.8 Limitations of the Study

The study relied heavily on data in the field. It was not possible to control the attitude of respondents during the study, as respondents out of fear of victimization could opt to give socially and professionally acceptable responses that could result in the study having inaccurate data. However, the respondents were assured of privacy and confidentiality so as to increase accuracy of the findings.

1.9 Assumptions of the Study

This study was carried out in selected public secondary schools from Matungulu Sub-County and the following assumptions were made:

- i. All respondents would cooperate and provide reliable responses.
- ii. All public secondary schools participating in the study conduct extra tuition.
- iii. All respondents would have the information the researcher sought for.

10.0 Definitions of Terms

The following are definitions of terms as used in the study.

Academic performance: refers to the extent to which students, teachers or schools have achieved their educational targets in relation to Kenya Certificate of Secondary Education grade.

Determine: refers to the process of ascertaining the views of educational stakeholders in regard to extra tuition.

Effects of extra tuition: refer to outcomes of additional tutoring activities which are reflected on the academic performance of the Learners.

Extra tuition: refers to tutoring in academic subjects which are provided by teachers for financial gains outside school hours and which is additional to the provision of mainstream schooling.

Parent: refers to a person who provides to the wellbeing of a student.

Perception of extra tuition: refers to views and opinions of teachers, students and other educational stakeholders regarding the concept of extra tuition.

Public secondary schools: refer to government owned institutions' that are registered to offer education to learners on regular basis from forms one to four.

School Administrators: refers to individuals who are entrusted by Ministry of Education with responsibility of day to day running of schools.

Student: refers to a person who is enrolled or attends classes at a school.

Teacher: refers to a person who instructs students

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter looks at the existing literature related to the effect of extra tuition on academic performance. It examines the effect of extra tuition on academic performance as perceived by students, teachers, school principals and parents. It also explores the theoretical and conceptual frame works of the study.

2.2 Effects of Extra Tuition on Academic Performance as Perceived by Students

A study carried out in Australia by Bray (1999) points out that learners appreciated extra tuition for it helped them to overcome knowledge or skills deficiency, build learner's confidence and create more learning experience. However, according to Bray (1999), extra tuition could also create or increase disparities among learners, especially if some of the learners were not able to afford extra tuition

Bray (1999) further observed that children involved in extra tuition often feel tremendous pressure, spend hours travelling to classes, work long hours and risk burnout. Sporting, leisure and even religious activities get crowded out by extra classes and that less family time remains. In some cases this has led to depression and even cases of suicide. It was important to establish whether these are the same feelings among learners in Matungulu Sub-County.

Raffick (2004) argues that extra tuition is the consequence of a heavy emphasis on examinations forcing students to seek outside help. The study contends that the pressure to excel in examinations propels students' and parents' demand for extra tuition. The study further contends that students are afraid of being overtaken by their peers and this is why extra tuition peaks during the last year of final national examinations. He notes that the common reasons given by students for attending private tuition was that their academic performance is not good.

Part of literature review showed that a survey carried out in Kisumu County, Kenya (Mboi and Nyambedha, 2013) indicated that 97.2 % of the pupils like extra tuition because: it helps them improve grades or standards, assist them to pass examinations, help them to get more knowledge and to complete the syllabus and revise for examinations. Other reasons include; enabling pupils move to the next class, for the weak pupils to improve and for teachers to earn additional income to supplement their salaries.

The pupils further confirmed that extra tuition helps them to understand what they do not understand well in class because of additional time. Some pupils reported that with extra tuition, teachers wanted them to pass their examinations to compete with other schools. This study was to establish if learners in Matungulu sub-County had similar perception towards extra tuition offered in their schools. These researchers' found that a minority (0.3 %) stated that extra tuition helped them get more clarification of the subjects compared to the normal class time.

Extra tuition provides quality interaction between pupils and teachers where pupils have time to ask more questions and teachers obtain extra time to properly respond to children's questions. At the same time the pupils suggested the need to reduce the time dedicated to extra tuition. Furthermore, they feared that school began too early and ended late and it would be insecure for some of them who came from far distances. This study intended to establish whether similar suggestions existed among the learners in Matungulu Sub-County.

2.3 Effects of Extra Tuition on Academic Performance as Perceived by Teachers

A study conducted in Hong Kong by Yiu (1996) indicated that teachers were positive about extra tuition for it helped them to consolidate content taught and to identify needs of individual learners. In Yiu's study teachers further felt that extra tuition programs not only had positive effects on academics, but also on the attitudes of the participants. The study notes that the average child in the tutored group scored at the 66th percentile of the students in the untutored or control group, and the tutoring of mathematics was more effective than tutoring of reading. This study sought to establish the effect of extra tuition as perceived by teachers in the Sub-County.

Bray (1999) observed that the desire on the part of teachers to earn an additional income may not adequately explain prevalence of tuition. Teacher dedication to good results and the desire for status are equally important factors. These teachers offered extra classes on a purely voluntary basis either before or after school hours. So, extra tuition exists also because the reputation of teachers very often rests on the academic results they are able to give to the public. Extra tuition in this case was viewed as a logical step towards establishing their reputation as teachers. These findings necessitated this study to establish whether teachers in Kenya are also motivated by prestige on performance in national examinations.

Ho Nga Hon (2010) noted that private tutors in Hong Kong regard private tutoring as a means of self-realization. Through educating students, private tutors can realize their potentials and abilities and in turn gain satisfaction and a sense of significance. A private tutor in the same study remarked that there was a huge sense of satisfaction in correcting his student's bad behavior and attitude. Being respected, needed, appreciated, thanked and cared for by both parents and students, allowed private tutors to find a sense of significance in their work.

The study further established that another purpose of private tutoring is self search. During private tutoring, one's lost memories can be re-traced. It is a chance to re-taste the feeling of being at school and relive these times. Another tutor revealed that by understanding a student's needs and ways of thinking, which were different from the tutor's own, due to a generation gap for example, one can understand oneself better. Extra tutoring can also help private tutors experience the career of teaching.

Hallack and Poisson (2007) observe that not every school can provide specialist teachers in all subjects. Therefore, extra tuition may help students to overcome deficiencies in learning, to understand and enjoy their mainstream lessons enabling them to compete fairly with others. These findings necessitated this study in the attempt to establish if the same is happening in secondary schools in the area that was under study.

Teachers in Kenya argue that extra teaching is necessary to complete syllabus due to the overloaded curriculum provided by Kenya institute of curriculum development (KICD). They felt that the bulk of work to be covered within four years is just too much for students to grasp

(KSSHA, 2012). According to them extra tutoring is designed to bring on board slow learners to help them compete with fast learners for grades that will enable them join the limited university places.

Nyagosia, Waweru and Njuguna (2013), pointed out that teachers in Kenya consider provision of extra tuition as an intervention strategy to address the weaknesses portrayed by candidates before they take the national examinations. Mboi and Nyambedha (2013) observed that the general feeling of Kenyan teachers is that extra tutoring helps relatively strong students to perform better in national examinations because of the extra questions provided for revision. This study sought to establish if teachers in the Sub-County are motivated by similar opinion.

2.4 Effects of Extra Tuition on Academic Performance as Perceived by Principals

Extra tuition is tutoring in academic subjects beyond the hours of mainstream formal schooling for financial gain or otherwise. This kind of learning often takes place outside school hours and or even in separate premises (Bray, 1999; Yoo, 2002; Kwok, 2004). The authors' distinguish between remedial lessons that seek to assist weak students or to assist under-achievers to improve in their weak subjects from additional tutoring that offer opportunities for teachers to earn supplementary income. These studies were done in Asian countries justifying the need for similar study to be conducted in Kenya.

Kibere (2005) categorizes extra tuition into two: remedial lessons and holiday tuition. For him, remedial teaching is often conducted in the evenings and weekends while extra tutoring is offered during school holidays. He resonates with Wanyama and Njeru (2004) who observe that extra tuition and remedial classes in Kenya is one and the same thing. Their study further established that tuition providers normally levy fees for the service they provide irrespective of whether it is labeled extra tuition or remedial classes.

Information obtained in a study on extra-school instruction, social equity and educational quality in Singapore indicates that extra tuition incorporates learning activities for the clientele of the formal school which takes place outside the regular school instruction programme for a fee or as

a community service (Marimuthu, Singh, Ahmed, Lim, Mukherljee and Oman 1991).Bray (1999) observes that extra tuition is often undertaken in the evenings, weekends, during school holidays and early in the morning. The duration of teaching and learning varies with institutions and the needs of the learners.

According to Sujatha (2006), teaching and learning process in India involves tutor-student contact ranging from 10-29 hours per week in most tuition centers depending on the number of subjects and grade. But generally, duration of teaching a subject varies from 50-60 minutes per lecture. There was a need for this study to establish principals' perception towards tuition in Matungulu Sub-County.

In some countries extra tuition seems to flourish most at certain pressure points. For example, in Sri Lanka these points are grade four when children are called upon to take scholarship examinations and form five and six, when students have to take "O" and "A" level examinations. This is because these examinations allow children to join famous and good schools and be entitled to allowances such as boarding and other expenses (Raffick, 2004). This study necessitated an investigation by the researcher to seek to establish pressure points when extra tuition is highly demanded in Matungulu Sub-County.

In Hong Kong massive scale of extra tuition is reflected by heavy advertisements of various types of extra tutoring in streets, popular public areas, through the mass media and by the increasing number of registered mass tutorial schools (Kwok, 2004). Literature review also reveals that providers of extra tuition tutors vary with age and qualifications. They range from secondary school students tutoring primary school pupils, university students tutoring secondary school students to retirees who wish to contribute to society and earn some extra money. In between these extreme ages are those who provide extra tuition on part time or full time basis and who may or may not have formal training (ANTRIEP, 2006).

Extra tuition can take different forms and the size of the classes can vary from a location to another. Home-based modalities of extra tuition are conducted individually or in small groups at the tutors or clients home. The tuition-centre modality is where students ranging from 30 to 60 in a class meet at a central venue where tuition is conducted. Large tuition classes can also be

conducted at school premises (Marimuthu, Ahmed, Mukherljee & Oman, 1991) and Raffick (2004). The researcher in this study sought to identify tuition modalities in schools in Matungulu Sub-County.

A 1997 national sample of 3,233 Standard 6 pupils in Kenya found 68.6 per cent were receiving tutoring, ranging from a low of 39.0% in North Eastern province to a high of 74.4 % in Nyanza Province Nzomo, Kariuki, and Guantai (2001). Another survey conducted in three geographically-distinct districts in Kenya indicated that tutoring was much more common in urban than in rural areas, and among boys rather than girls (Buchmann, 2002).

Wanyama and Njeru (2004) identifies that extra tuition tend to focus on subjects that are deemed to be instrumental particularly languages, mathematics and science. This was later confirmed by Mburungu (2011) in a study in Imenti North district of Kenya which found that extra tuition was offered to form three and form four classes in all subjects with more emphasis on mathematics, sciences and languages. My study sought to identify areas of focus by schools during tuition time.

Wanyama and Njeru (2004) note that Some Ministry of Education, Science and Technology (MOES&T) officials - who are supposed to articulate Government Policy on Education - take their children to extra tuition classes. This is because they too, have to equally compete for the limited places at higher levels of learning and this can only be achieved through good performance in national examinations. This study sought to identify reasons which motivate schools to offer extra tuition.

2.5 Effects of Extra Tuition on Academic Performance as Perceived by Parents

Parental factors like socio-economic status, parenting styles and parents attitude may influence child's performance. Parental involvement in child's performance has been used to mean parental expectations of school performance, deliberate effort by the home to reinforce improved academic performance, and general academic guidance and support (Olatoye and Ogunkola, 2008).

A study by Zhao and Akiba, (2009) indentified several dimensions of parental involvement among them is non-participation parents who are not involved in their children learning activity. They may either be satisfied with what the school is offering, or are too busy at work, or want time away from their children. The second dimension is the support parent, where parental involvement occurs only when parents are invited to attend school events like parent/teachers meetings, contributing to developing school polices or by providing money for learning activities such as extra tutoring.

Extra tuition constitutes a serious financial burden to the low income households yet strong support for the practice comes from both parents and students. Ho Nga Ho (2010) notes that working class and middle class families in Hong Kong employ private tutors as an educational investment. The working class families regard private tutoring as a way to attain upward social mobility, while the middle class families wish to remain as social elites. The study further confirms that more than 50% of both low-income and middle-income households in Hong Kong spent 1.1-5.0% of their monthly household income on tutoring fees.

Only 3.6% of low-income households spent 15.1-20.0% of their monthly household income on the fees, compared to 12.5% of middle-income households that did so. These numbers reflect that middle class families are more willing to spend money on private tutoring. Moreover, it has been proven that there is a consistent and direct relationship between parents" educational levels and consumption of private tutoring. That is, the higher the parents education levels, the higher the investment in private tutoring.

Apart from economic considerations, parents in Hong Kong hire private tutors to take care of the individual needs of students. Special care should be provided to students with emotional, behavioral, physical and mental problems. Students with successful academic results should also be given particular attention, so as to obtain even higher levels of achievement. Meanwhile students with general levels of accomplishments have some catch-up work to do. Therefore, it is legitimate for most families to hire private tutors to suit "their needs".

A number of studies have attempted to identify the factors that sustain the behind-the-scenes extra tuition system in Kenya and elsewhere. In 1994, the Mauritius government discouraged tutoring in all grades and prohibited it for children in the initial three primary grades (Mauritius

Govt, 1994). However, ambitious parents continued to employ independent tutors outside the schools, and subsequent evaluation showed that the problem remained unabated (Raffick, 2004).

Davies and Aurini (2006) observes that in order to understand the reasons for the existence of tutoring, it is useful to look at both the consumers and the producers. The consumers include the parents as well as the pupils. He pointed out that many families invest in tutoring as part of "intensive parenting".

The study further notes that hiring of tutors in Canada is part of a wider strategy in which parents place a great premium on education, value a cognitively stimulating environment for their children, and closely monitor their children's activities. This style of parenting emphasizes a careful plan of structured activities for children; in which tutoring is part of a series of extra lessons that also include music, dance, and sports.

Wanyama and Njeru (2004), in the context of Kenya, observes that the prevalence of private tuition has more to do with the emphasis on examination as a basis for staff recruitment and promotion. Still, at higher level of education many parents may feel incompetent to help their children as per the curriculum content. In addition; parent employment and other personal commitments leave them with little time to spend in assisting children.

Mboi and Nyambedha (2013) contend that decisions to conduct extra tuition are made during Parents Teachers Association (PTA) meetings were pupils are not allowed to participate. This study aimed at establishing if parents were involved in extra tuition decisions in Matungulu Sub-County.

2.6 Theoretical Framework

This study embraced human capital theory. Human capital theory was introduced and developed in the 1960s by two Nobel Laureate economists, Theodore Schultz and Gary Becker. The two Economists argue that individuals acquire skills and abilities to increase their labour market value. In essence, human capital theory considers experience, training and education as mechanisms for increased productivity and output capacity in individuals (Glewwe, 2002).

Human capital theory holds that investment in human resources results in improved productivity, and that both the costs of the investments and the benefits of improved productivity can be used to calculate an economic rate of return. Human capital investments generally take the form of education or training and may include health care as well.

An important distinction is made between private and public (social) rates of return. Private rates of return accrue to families from human capital investments. Social rates of return include private returns, but also consider positive externalities such as improved public health, diffusion of democratic values and practices, and more freedom for individuals in society.

It is widely accepted that there are positive externalities accruing from secondary education (Schultz, 1961; Becker, 1964). Returns to investment in education based on human capital theory have been estimated since the late 1950s. Reviews of the empirical results and estimates from a wide variety of countries reaffirm the importance of human capital theory.

For instance, Glewwe (2002) made a strong empirical case that increased earnings from education result from increased individual productivity that comes from literacy and numeracy. Glewwe's review of earnings and measures of both ability and cognitive skills based upon administering tests to the household members or workers in sample surveys from six developing countries (Ghana, Kenya, and Tanzania in single study, Morocco, Pakistan, and South Africa) lends support to the human capital interpretation of the education and earnings association.

Psacharopoulos and Patrinos (2004) attempted to use rate of return analysis for education policy purposes involving worldwide compilations and presented a number of tabulations that confirm that it is generally a good investment for individuals to stay in education systems for as long as possible.

The study further pointed out that families with sufficient resources invest in private or extra tutoring to help their children pass examinations and proceed to good secondary schools that guarantee their children a place at the university thereby almost guaranteeing them better—paying jobs (earnings). Based on this theory, this study set to investigate the perceived effects of extra tuition on academic performance by students, teachers, school principals and parents in Matungulu Sub-County, in Machakos County.

2.7 Conceptual Framework

The following is the conceptual framework of the study

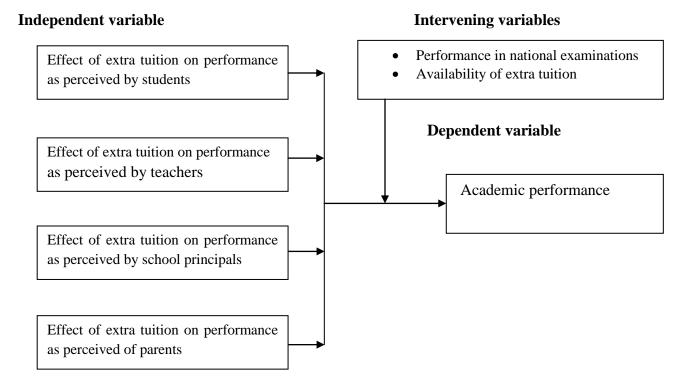


Figure 1: Effect of Extra Tuition on Performance

The conceptual framework shows that the effects of extra tuition on academic performance will depend on: students', teachers', school administrators' and parents' perception towards extra tuition. This will allow conclusion to be made on whether extra tuition has effects on academic performance in Educational Institutions.

Effects of extra tuition on academic performance as perceived by students, teachers, school administrators and parents will reflect their feelings towards extra tuition phenomena. This information will be used by policy makers to make decisions on issues related to extra tuition in schools.

The intervening variables on the other hand will affect the relationship between the independent variables and the dependent variable in that if there is low performance in the national examinations, parents and teachers will be willing to allow students to go for extra tuition to improve their performance and vice versa. At the same time, if extra tuition is available in schools, parents and teachers will allow students to go for extra tuition to improve their performance thus allowing them to compete favorably for the limited chances in higher institutions of learning.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights the research design, the location of the study, the target population, sampling procedures and sample size, methods of data collection. It also includes data collection instruments, validity and reliability of research instruments, methods of data analysis and ethical considerations relating to this study.

3.2. Research Design

This study adopted a descriptive research design. This design is used to collect data concerning the current status of the subjects in the study. It attempts to describe possible behavior, attitudes, values and characteristics of the phenomenon under study (Mugenda and Mugenda, 2012). The researcher employed this design to investigate on the effect of extra tuition on academic performance in public secondary schools in Matungulu Sub-County. Data collected helped the researcher to gather information regarding the area of study. The information was obtained through a questionnaire which was administered to respondents in the location under study.

3.3 Location of the Study

This study was carried out in public secondary schools in Matungulu Sub-County, Machakos County. Matungulu Sub-County is bordered by the following Sub-Counties; Kangundo & Kathiani to the south, Thika to the north, Mwala to the east and Nairobi County to the west. The location was used as a sample for in-depth investigation on the effect of extra tuition on academic performance in public secondary schools.

3.4 Target Population

The target population included school principals, teachers, parents' and Form three students in public secondary schools in Matungulu Sub- County. Records at Matungulu Sub-County Education offices indicated that by January 2014, the Sub-County had 33 public secondary schools with 380 teachers and 1611 form three students as indicated on (Table 1).

The school principals and teachers were targeted for information in this study because they are providers and direct beneficiaries of extra tuition. The researcher targeted Form 3 students because they had been in the school for a longer time relative to forms 1 and 2 and were likely to have been involved in extra tuition. Form three students were therefore in a position to provide the information being sought. Form 4 students were exempted because they were busy preparing for national examinations.

Table 1: Form 3 & 4 Enrolments 2011 – 2014

Year	Form 3	Form 4
2014	1611	1562
2013	1557	1546
2012	1640	1615
2011	1653	1659
Total	6461	6382

Source: Matungulu DEO's office 2014

3.5 Sampling Procedures and Sample Size

Simple random sampling was used in this study in selecting 10 schools out of the 33 public secondary schools in Matungulu Sub-County. Gay (1992) suggested that as the sample size approaches the population size, the more representative it is. The schools were stratified into two categories of day and boarding schools. For each category, simple random technique was used to obtain five (5) day schools and five (5) boarding schools. The ten (10) principals of the participating sampled schools participated in the study.

The total population of teachers in Matungulu Sub-County is 380 (DEOs office, 2014). Four (4) teachers (10%) from each of the sampled schools participated in the study. The researcher

selected two (2) teachers teaching form 3 and two (2) teachers teaching form 4 from each of the sampled schools, given that it is in these classes where extra tuition is most preferred in schools. The researcher used simple random technique to select teachers in each school. A total of forty (40) teachers were obtained. According to data obtained from Matungulu Sub-County Education office, the student population in form 3 in 2014 was 1611 in all the 33 public secondary schools.

The researcher used the class register to establish the number of Form 3 students in each school. By serializing the admission numbers, the researcher arranged students' names in ascending order on the list. By selecting the first case of the list, a sampling constant K was then determined i.e. Sampling constant K = population / sample size. Then every Kth student was systematically drawn until 16 students were selected from each school. The 160 students comprised 10% of the total population which is considered adequate in descriptive statistics (Ary, Jacobs and Razavieh, 1972).

To obtain parents as respondents in each sampled school, the researcher obtained a list of all PTA members from the school. Four (4) parents in every sampled public secondary school were selected. A total of forty (40) parents were obtained for this study. The researcher worked with deputy principals of the ten sampled schools to administer a questionnaire to the parents for data collection. The sample size comprised 250 respondents (160 students, 40 teachers, 40 parents and 10 head teachers) as shown in Table 2.

Table 2: Sample Size

Category of Subjects	Number per school	Number of schools	Total
Head teachers	1	10	10
Teachers	4	10	40
Parents	4	10	40
Students	16	10	160
Total	25	40	250

3.6 Methods of Data Collection

Before data collection the researcher sought consent from South Eastern Kenya University and obtained research permit from the National Commission for Science, Technology and Innovation (NACOSTI). Principals of the selected schools and respondents including teachers were informed in advance. The researcher personally administered the questionnaires to principals, teachers, parents and students which were accompanied by a cover letter for each schedule explaining the intention. Respondents were assured of confidentiality of the data to be collected on the basis that the information was to be used strictly for academic purposes. The researcher was available throughout to offer assistance to the respondents and make any necessary clarifications. A day was set aside for each school. The researcher administered questionnaires to head teachers at the agreed time.

3.7 Data collection Instruments

There were four groups of respondents as indicated in the population of the study. In all the four groups, questionnaires were used to collect data. Mugenda and Mugenda (2012) suggested that questionnaires help to obtain important information because they are developed to address specific objectives. The questionnaires used sought to measure attitude/perception of the respondents on a five point likert type of scale as follows: using this scale, 1 represented 'Strongly agree', 2 represented 'Agree', 3 represented 'Undecided', 4 represented 'Disagree' and 5 represented 'Strongly disagree'. The instruments were developed such that they contained items that were in line with study objectives.

3.8 Validity and Reliability of Instruments

Validity of a test represents the extent to which a test measures what it purports to measure (Orodho, 2005). To enhance content validity, the questionnaire was designed in consultation with the supervisors. Their contributions and suggestions were used to clarify ambiguous questions, add new questions that could have been forgotten and omit questions that were irrelevant. This helped to reduce error in data collection and analysis.

Reliability concerns the degree to which the same results would be obtained with a repeated measure. Orodho (2005) observes that if the scores obtained from each respondent in the two

tests are identical or quite close, the measurement will be perceived to be reliable. Test-retest reliability was computed to assess the reliability of research instruments. A pilot study was carried out to test the reliability and the validity of the instruments in one of the public secondary schools in Matungulu Sub-County whose teachers and students were not part of the study sample. Participants of the pilot study were asked to complete the instruments and to provide comments or suggestions for revising any ambiguous items which were incorporated to improve the instruments.

3.9 Data Analysis Techniques

Data collected was processed, coded and analyzed to facilitate answering the research objectives. This was done using both descriptive and inferential statistics. Descriptive statistics were used to summarize and organize data and to describe the characteristics of the sample using the mean and standard deviation.

In order to facilitate this, the questionnaire scale was transformed into a continuous scale data of four class intervals and interpretation of scores was done as follows: "Strongly agree" was transformed to refer to the class interval of 1.0 to 2.0; "Agree" referred to class interval of between 2.0 to 3.0; "Disagree" represented a class interval of between 3.0 to 4.0 while a class interval of between 4.0 to 5.0 represented "strongly disagree".

For precision in interpretation of the findings however, scores ranging between agree and strongly agree were held as portraying a positive or favorable view concerning the tuition phenomena while those in the score range of disagree and strongly disagree were interpreted to mean a negative or unfavorable perception towards extra tuition.

To facilitate this, the SPSS programme version 20, was used to run the analysis. All the null hypotheses that were formulated to answer the objectives were tested using the t-test for independence of means at a 0.05 level of significance. Analysed data were then presented in form of frequency tables, bar graphs, and pie charts.

3.10 Ethical Considerations

Researchers have authority over subjects they study by virtue of their training and legal authority (Creswell, 2010). However, the researcher did not misuse these powers bestowed to her to undermine respondents' rights. The respondents who were consulted were asked to freely participate without being coerced or lured in any way. Some of the essential ethical principles that guided this study included consent to eliminate any confusion and possibility of negative consequence, voluntary participation and harm.

The study eliminated anything that would bring about abuse or embarrassment to any individual taking part in the questionnaires. This was made possible by explaining the research objectives verbally and in writing so that they were clearly understood. Respondents' anonymity and confidentiality was assured by putting individual codes on the research instrument. On completing the research any interpretation and reports would be availed to the informants to clear any doubts of the study's intentions.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents results of the analyzed data under the following sub-headings, response rate, demographic characteristics of respondents, and finally the results of findings based on the objectives of the study. In addition and where relevant, selected findings from literature have been used to inform and contrast between variables in testing the hypotheses.

4.2 Response Rate

A total of 250 respondents were sampled for the study. This constituted 160 students, 40 teachers, 40 parents and 10 principals. All the questionnaires were personally administered to respondents and were received back representing 100% return rate. According to Babbie (1986), a response rate of 50% is considered adequate, 60% good and 70% very good (p 324). Hence this response rate was judged to be very good and hence, one could place a high degree of confidence on the results of the study. The response rate findings are as reported in Table 3.

Table 3: Questionnaire Response Rate

Category of respondents	No of questionnaires issued	% returned
Head teachers	10	100
Teachers	40	100
Parents	40	100
Students	160	100
Total	250	100

4.3 Demographic Characteristics of the Respondents

Some of the demographic characteristic that the study sought to find out included gender, school category, and teaching experience for the teachers and principals. The results of these analyses are presented in the following sections:

Demographic Characteristics of the Students

One demographic variable that the study sought to determine with regard to the students was gender. The results are presented in Table 4.

Table: Gender of the Students

Gender	Frequency	Percent (%)	
Male	68	42.5	
Female	92	57.5	
Total	160	100.0	

As shown in Table 4, it can be observed that majority 92 (58%) of the students sampled were females while about 68 (42%) were males. This indicates that more than half of the students in Matungulu Sub-County are female.

Demographic Characteristics of the Teachers

Besides the gender of the teachers, this study sought to find out the duration the teachers had served in the current school. The results are presented in tables 5 and 6.

Table 5: Gender of the Teachers

Gender	Frequency	Percent (%)	
Male	22	55.0	
Female	18	45.0	
Total	40	100.0	

Table 5 indicates that 22(55%) of the teachers respondents were male, while 18(45%) were female. This shows that majority of the teachers in the study population were males because the sample drawn was representative of the population. Matungulu being a rural area is likely to be unattractive to female teachers who prefer working in urban areas as Wachira (2014) found out.

Knowledge about duration that a teacher had served in the school was considered useful in informing this study regarding the firm belief and perceptions that are held by teachers across different teaching experiential levels. The findings on teaching experience are presented in Table 6.

Table 6: Duration of Teaching Service

Duration	Frequency	Percent (%)	
less than 5 years	28	70.0	
6-10 years	4	10.0	
above 10 years	8	20.0	
Total	40	100.0	

It can be observed from Table 6 that majority of the teachers who were 28 (70%) of the teachers sample had served in the school for a period of less than five years while 8(20%) teachers had served for over ten years and the other 4(10%) teachers had served for a period of between 6-10 years. This implies that the teachers' perception of extra tuition in Matungulu is likely to be skewed in favour of teachers with a teaching experience of less than five years in the school since they formed the majority.

Demographic Characteristics of Principals

Three variables formed the basis of capturing principals' demographic characteristics. These included gender, category of school and principal's experience in the school. Tables 7, 8 and 9 represent analysis in relation to the aforementioned variables.

Table 7: Gender of the Principals

Gender	Frequency	Percent (%)
Male	6	60.0
Female	4	40.0
Total	10	100.0

As per the results shown in Table 7, it can clearly be observed that distribution of male principals in the study area is more than that of the females. The table shows that for every 3 male

principals, there are 2 female principals as can be inferred from the 6(60%) male distribution compared to the 4(40%) female distribution. Regarding the distribution of the principals in terms of school category, Table 8 shows the findings.

Table 8: Distribution of Principals' as per School Category

Category	Frequency	Percent (%)
Day	5	50.0
Boarding	5	50.0
Total	10	100.0

It can be observed from Table 8 that 5(50%) of the sampled principals were from day schools while 5(50%) were drawn from boarding schools. This is in line with the stratification of day and boarding schools in the study population. The study also sought to find out how long the principals had stayed in the current school. Results of this analysis are presented in Table 9.

Table 9: Principals' Work Experience

Duration	Frequency	Percent (%)	
less than 1 year	1	10.0	
1-5 years	2	20.0	
6-10 years	5	50.0	
over 10 years	2	20.0	
Total	10	100.0	

Those principals who had worked in the school for a period of 6-10 years were 5(50%). They represented half of the sample. This was followed by those principals who had worked in their respective schools for a period of between 1-5 years and over 10 years respectively with each representing 2(20%) of the sample. Only 1(10%) of the principals had worked in their respective stations for a period of less than 1 year, and indication that majority of the principals were familiar with the practice of extra tuition in their respective schools.

Demographic Characteristics of Parents

Finally the study sought to find out the gender of the parents who had been sampled to participate in the study. The findings are presented in Table 10

Table 10: Gender of the Parents

Gender	Frequency	Percent (%)	
Male	16	40.0	
Female	24	60.0	
Total	40	100.0	

Majority of the parents who were sampled were females 24 (60%) while the males were 16 (40%). This shows that majority of the parents who attend school meetings from where the sample was drawn are females.

4.4 Perceived Effect of Extra Tuition on Academic Performance by Students' and Teachers

Based on the first objective of the study, the researcher sought to find out if extra tuition is offered to students outside the normal learning hours, persons who ask students to attend extra tuition, work covered and in which subjects. The study further sought to find out if students would like extra tuition to continue being offered, reasons for continued extra tuition and any other strategy which can be used to improve their performance.

Time When Extra Tuition is offered

Regarding the time when extra tuition is offered, the students were asked to indicate 'yes' or 'no' if extra tuition is offered outside normal timetable. The findings of the study were as presented in Figure 2.

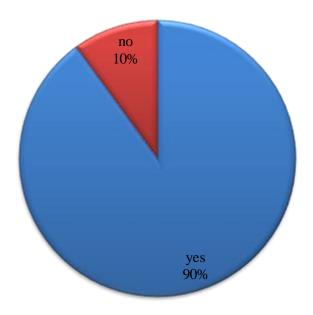


Fig 2: Time when Extra Tuition is offered

Fig 2 shows that 144 (90%) of the students respondents were given extra tuition in their schools outside the normal learning hours, while 16 (10%) of the students respondents were given extra tuition within the normal learning hours. A questionnaire administered to school principals showed that all the principals 10 (100%) indicated that extra tuition is offered in their schools which is in agreement with Bray (2003) findings that a survey conducted in Hong Kong in 1996 found that 25.6 % of lower secondary students, 34.4 % of middle secondary students and 45% of upper secondary students were recipients of extra tuition. This rose to 28.0%, 33.6% and 48.1% respectively in a 2004/2005 survey of 13,600 households (Bray, 2009).

Responses Regarding Persons who Asked Students to Attend Tuition

Concerning the attendance of extra tuition, students were asked to indicate who asks them to attend. The findings of the study were presented in figure 3.

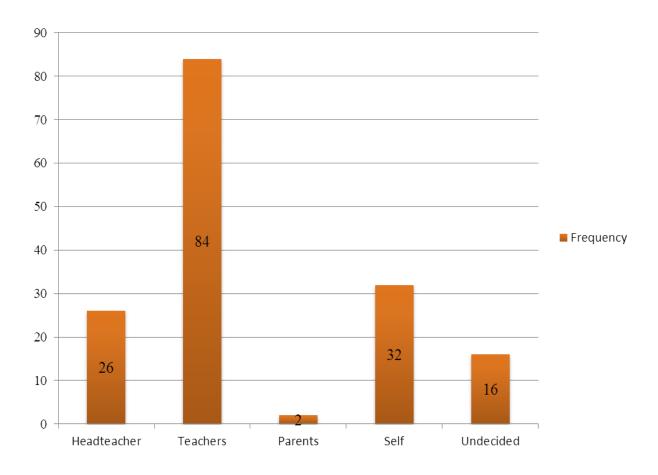


Fig 3: Persons who Asked Students to Attend Tuition

Fig 3 indicates that 26(16.3%) of the students were requested by the head teachers to attend tuition, 84(52.5%) students were requested by teachers, 2(1.3%) students were requested by parents, 32 (20%) of the students resolved to attend extra tuition while 16 (10%) of the students did not offer a response to that question. A questionnaire administered to principals indicated that decisions to have extra tuition in schools were made by teachers, parents and students, while parents' responses indicated that 24(60%) of the parents made extra tuition decisions for their children. From the findings it can be argued that the decision to have extra tuition in schools is mainly made by teachers, followed by students, parents and principals. The finding that teachers are seen to be the key decision makers as regards tuition could be due to the fact that they are accountable when students do not perform well.

Work Covered During Extra Tuition

Students were asked to indicate the work covered during extra tuition in the study. Students responses regarding work covered during extra tuition were presented in Table 11.

Table 11: Work covered during extra tuition

Type of work	Frequency	Percent (%)	
Revision of work already done	41	25.6	
Evaluation/tests	1	0.6	
Syllabus coverage	102	63.7	
Undecided	16	10.1	
Total	160	100	

Table 11 indicates that 102 (63.7%) of the students cover syllabus content during extra tuition while 41(25.6%) of the students revise work already done. This is an indication that time available for syllabus coverage is inadequate and therefore need for more time. This is in agreement with Mboi & Nyambedha (2013) who report that 97.2% of the pupils like extra tuition because it helps to complete syllabus and revise for examinations. Responses to one of the students questionnaire items showed that 91(56.8%) of the students said that extra tuition is conducted in all subjects which helps in early coverage of syllabus. It is evident from the findings that extra tuition helps in syllabus coverage and revision of work done.

Students Support for Continued Extra Tuition

Concerning support for continued extra tuition, students were asked to indicate if they would like extra tuition to continue being offered in schools or not. The findings of their responses were as shown in figure 4.

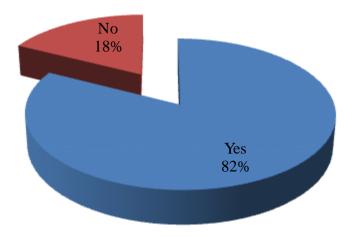


Figure 4: Percentage of Students Support for Extra Tuition

Figure 4 shows that 132 (82.5%) of students would like extra tuition to continue being offered, while 28(17.5%) of students were against extra tuition. Another question in the same questionnaire administered to students showed that 90(56.2%) of students preferred extra tuition because it helps in early coverage of syllabus, while 63 (39.3%) of students preferred extra tuition because it helps in revision.

These perceptions were consistent with those of Kenyan teachers who argue that extra teaching is necessary to complete syllabus due to overloaded curriculum (KESSHA, 2012). Minority of the students 28 (17.5%) did not support extra tuition because they felt that they needed time to relax and improve on their talents, it was a source of negative relationships between teachers and students, it increases financial burden to parents and denies them time for individual study.

Responses on other strategies to improve performance indicated that 87 (54.3%) of the students preferred to be issued with revision textbooks, 24 (15.0%) preferred group discussions, 21(13.1%) requested for recruitment of more teachers while 14 (8.7%) said students should manage their time well.

Teachers Perception of Extra Tuition

In this section the study sought to find out whether extra tuition is conducted in schools where teachers teach, the classes involved, approaches of extra tutoring, subjects in which extra tuition is offered, teachers support of the practice and reasons for supporting extra tuition. The findings were presented in the following sections:

Practice of Extra Tuition

Regarding the practice of extra tuition, teachers were asked to indicate whether extra tuition is held in their schools or not. Teachers' responses concerning the practice of extra tuition in schools were presented in figure 5.

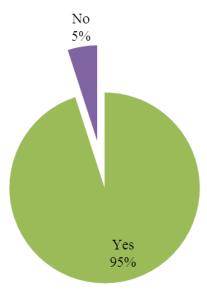


Figure 5: Teachers response regarding the practice of extra tuition

Figure 5 shows that 38 (95.0%) of the teachers reported that extra tuition is conducted in their schools. A questionnaire administered to principals indicated that 8 (80%) of the principals said that extra tuition is offered in their schools. Which is in agreement with-Wanyama and Njeru (2004), who observed that extra tuition and remedial classes in Kenya is one and the same thing and that, it is a widespread practice in the country. This is mostly likely because students have to compete for the limited places at higher levels of learning and this can only be achieved through good performance in national examinations.

Classes involved in the Extra Tuition

Teacher respondents were asked to indicate the classes involved in extra tuition. Their responses were presented in figure 6.

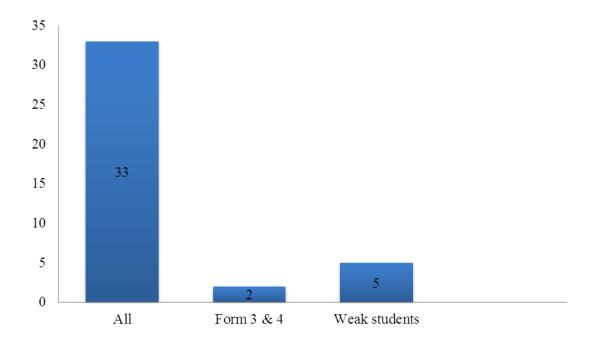


Fig 6: Classes involved in Extra Tuition

Figure 6 Indicates that 33(82.5%) of teachers were of the view that all the students were involved in extra tuition. 2 (5%) teachers indicated that form 3 and 4 were involved, while 5(12.5%) of the teachers indicated that it is weak students who are involved. This finding is in support of the earlier finding where 36(90.0%) of the teachers mentioned that extra tuition is conducted in all subjects in one of their questionnaire items. The findings are also consistent with those from students questionnaire in which 91 (56.8%) of the students said that extra tuition is offered in all subjects.

From the findings of the study, it can be said that most of the students were involved in extra tuition. This finding seem to be consistent with that of Bray (2003) who reported, in a survey conducted in Hong Kong in 1996, that 25.6 % of lower secondary students, 34.4 % of middle secondary students and 45% of upper secondary students were recipients of extra tuition.

Extra Tuition Approaches

Teachers were asked to highlight approaches used in extra tutoring in schools studied. Responses from teacher respondents were as presented in figure 7.

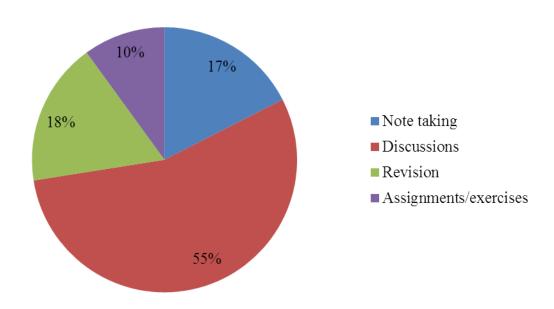


Fig 7: Extra Tuition Approaches

Figure 8 indicates that 7 (17.5%) of the teachers use note taking approach, 22 (55.0%) use discussions, 7 (17.5%) do revision while 4 (10%) of the teachers give assignments/exercises during extra tuition time. From the findings, it can be said that the most common approach of extra tutoring in Matungulu Sub-County is discussions followed by note taking and revision while giving of assignments/exercises is the least used approach.

Teachers support for Extra Tuition.

Teachers' were asked to indicate their support for the practice of extra tuition by stating either 'yes' or 'no'. Their responses concerning support for the practice of extra tuition were shown in the Table 12.

Table 12: Teachers Support for extra tuition

Response	Frequency	Percent (%)	
Yes	34	85	
No	6	15	
Total	40	100	

Table 12 shows that 34 (85.0%) of the teachers support the practice of extra tuition. Reasons advanced by teachers for support of extra tuition included the need to cover syllabus 23(57.5%) and the need to indentify needs of individual learners 14 (35.0%) among others. These findings were consistent with a study conducted in Hong Kong by Yiu (1996) which indicates that teachers were positive about extra tuition for it helped them to identify needs of individual learners and were the average child in the tutored group scored at the 66th percentile of the students in the untutored or control group.

Testing whether students perception of extra tuition on academic performance differ from that of teachers

An inferential analysis was conducted to address the first objective comprehensively. This objective sought to find out whether the perceived effects of extra tuition on academic performance by students differ from that of teachers.

A descriptive analysis of the perception index between teachers and students perception is shown on Table 13.

Table 13: Mean Perception Index between Teachers and Students

Respondent Category	N	Mean	Std. Deviation
Teachers	40	2.130682	0.5714649
Students	160	2.228977	0.7582368

Table 13 clearly shows that the mean perception of teachers was 2.13 with standard deviation of 0.57 while that of students was 2.22 with standard deviation of 0.76, implying that both the students and teachers had a favorable perception towards extra tuition as the mean ranges were between the agree and strongly agree continuum as per the interpretation scale (refer to chapter 3).

In order to determine whether the mean differences in perception index as observed in Table 13 were statistically different, a t- test for independence of means was run to test the hypothesis which had been formulated in view of objective one thus: "Students' perception of extra tuition on academic performance does not significantly differ from that of teachers". This hypothesis was tested at a 0.05 level of significance as shown in Table 14.

Table 14: t-test for Equality of Perception Means between Teachers and Students

	t	df	Sig.(2-tailed)	Mean Difference
Equal variance assumed	-0.767	198	0.444	-0.0982955
Equal variances not assumed	-0.907	77.215	0.367	-0.0982955

From Table 14 it can be observed that there was no statistically significant difference between the perception scores of teachers and students about extra tuition on academic performance (t (198) = -0.767, p= 0.444). This implies that the perceptions of teachers and those of the students were statistically independent and hence the first null hypothesis which stated that: Students' perception of extra tuition on academic performance does not significantly differ from that of teachers was accepted. These findings imply that the mean perception of teachers was 2.13 with standard deviation of 0.57 while that of students was 2.22 with standard deviation of 0.76 hence both students and teachers had a positive view in regard to extra tuition.

4.5 Perceived Effect of Extra Tuition on Academic Performance by Teachers and School Principals

Based on the second objective of the study, the researcher sought to establish whether extra tuition is conducted in schools studied, extra tuition decisions in schools, the role of principals on extra tuition, principal's support of extra tuition and what can be done to reduce the need for extra tutoring by schools in Kenya.

Practice of Extra Tuition

Concerning the practice of extra tuition in schools, principals' were asked to indicate if extra tuition is conducted in their schools by stating 'yes' or 'no'. Their responses were reflected in the following Table 15.

Table 15: Principals Response on Practice of Extra Tuition

Response	Frequency	Percent (%)	
Yes	10	100	
No	0	0	
Total	10	100	

According to principals, all schools 10 (100%) in Matungulu Sub-County conduct extra tuition as shown in Table 15 above. Decisions to conduct extra tuition in schools are made by parents, teachers and students as shown in principals responses 6 (60.0%) to one of the questionnaire items. These findings were consistent with Mboi & Nyambedha (2013) who contend that decisions to conduct extra tuition are made during Parents Teachers Association (PTA) meetings to help students in their weak subjects, to improve academic standards and school performance and to help students to revise. The findings also indicate that 5 (50.0%) of the principals teach and carry out supervision exercise during extra tuition.

Principals Support for Extra tuition

Principals' were asked to indicate their support for extra tuition by stating 'yes' or 'no'.

Their responses were shown in figure 9.

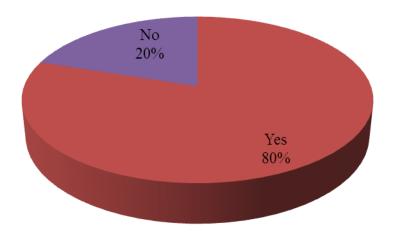


Fig 8: Principals Support for Extra Tuition

Fig 8 shows that 8 (80.0%) of the principals in Matungulu Sub-County support extra tuition, while 2 (20%) do not support extra tuition. Regarding reasons for the support of extra tuition, 7 (70%) of the principals indicated that extra tuition helps to cover syllabus, helps in revision, improves students and school performance and motivates teachers as a token of appreciation is given to them. Minority of the principals' 1 (10%) felt that extra tuition over-stretched students and teachers leading to stress. This finding supports the need for tuition in agreement with teachers' and students' responses in earlier sections.

Regarding ways on how extra tuition can be reduced in schools, principals' gave the following strategies among others:

- i. BOM & PTA need to discourage extra tuition in schools
- ii. Need to reduce syllabus content to manageable levels
- iii. Need for the government to recruit more teachers.
- iv. MOE to reduce examinable subjects
- v. MOE to make term dates longer
- vi. Effective supervision of curriculum implementation

Testing whether teachers perception of extra tuition on performance differ from that of principals

An inferential analysis was conducted to address the second objective comprehensively. This objective sought to establish whether the perceived effects of extra tuition on academic performance by teachers differ from that of school principals'. A descriptive analysis of the perception index between teachers' and principals' perception is shown on Table 16.

Table 16: Mean Perception Index between Teachers and Principals

Respondent Category	N	Mean	Std. Deviation
Teachers	40	2.130682	.5714649
Principals	10	2.250000	.5568053

Table 16 clearly shows that the mean perception of teachers was 2.13 with standard deviation of 0.57 while that of principals was 2.25 with standard deviation of 0.55, implying that both the students and teachers had a favorable perception towards extra tuition as the mean ranges were between the agree and strongly agree continuum as per the interpretation scale (Chapter 3).

In order to determine whether the mean differences in perception index as observed in Table 16 were statistically different, a t- test for independence of means was run to test the hypothesis which had been formulated in view of objective two thus: "Teachers' perception of extra tuition on academic performance does not significantly differ from that of Principals". This hypothesis was tested at a 0.05 level of significance as shown in Table 17.

Table 17: t-test for Equality of Perception Means between Teachers and Principals

	t	df	Sig.(2-tailed)	Mean Difference
Equal variance assumed	-0.593	48	0.556	-0.1193182
Equal variance not assumed	-0.603	14.138	0.556	-0.1193182

From Table 17 it can be observed that there was no statistically significant difference between the perception scores of teachers and principals about extra tuition on academic performance (t (48) = -0.593, p= 0.556). This implies that the perceptions of teachers and those of the principals were statistically independent and hence the second null hypothesis which stated that: Teachers' perception of extra tuition on academic performance does not significantly differ from that of principals was accepted. This findings implies that the mean perception of teachers was 2.13 with standard deviation of 0.57 while that of principals was 2.25 with standard deviation of 0.55 hence both teachers and principals had a positive view in regard to extra tuition.

4.6 Perceived Effect of Extra Tuition on Academic Performance by Parents and

Teachers

Based on objective three of the study, the researcher sought to find out if parents were aware that their children participate in extra tuition, extra tuition decisions for their children, parents opinion regarding extra tuition and academic performance of their children and what can be done to reduce the need for extra tutoring by students.

Participation in Extra Tuition

Parents were asked to indicate if their children participate in extra tuition by stating 'yes' or 'no'. Parents' responses were reflected in the following figure 9.

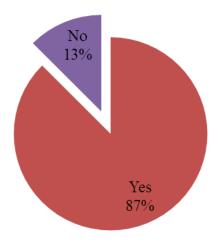


Fig 9: Participation in Extra Tuition

Fig 9 shows that 35(87.5) of the parents said that their children participate in extra tuition while 5 (12.5%) said that their children do not participate in extra tuition. Regarding extra tuition decisions, 24 (60.0%) of the parents said that they make extra tuition decisions for their children, 4 (10.0%) parents said that principals and teachers decide for their children; while 3(7.5%) of the parents said students decide for themselves. From the findings it can be argued that students in Matungulu Sub-County participate in extra tuition and decisions to attend tuition are made by their parents' principals and teachers.

Parents' Opinion on Extra Tuition and Academic Performance

Concerning parents' opinion on extra tuition and academic performance, parents were asked to indicate whether extra tuition improves academic performance of their children by stating 'yes' or 'no'. Their responses are shown in figure 10.

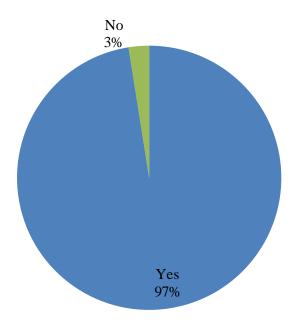


Fig 10: Parents Opinion on Extra Tuition

As shown in Fig 10, 39(97.5%) of the parents said that extra tuition improves academic performance of their children while 1(2.5%) of the parents said that extra tuition does not improve academic performance of their children. Reasons as to why parents felt that extra tuition improves performance included the following: extra tuition helps in syllabus coverage, helps weak students to improve, allows enough time for revision and helps to improve individual and school performance. This finding supporting the need for tuition is in agreement with teachers' and students' responses in earlier sections. The findings of this study were supported by Davies (2006) who noted that hiring of private tutors in Canada was part of a wider strategy in which parents place a great premium on education.

Strategies to Reduce the Need for Extra Tutoring

Parents gave the following strategies regarding the need to reduce extra tuition.

- i. Syllabus to be covered within term dates
- ii. Effective implementation of the curriculum
- iii. Recruitment of more teachers

- iv. MOE to reduce syllabus content
- v. Provision of educational resources like textbooks
- vi. Proper time management by schools

Testing whether parents perception of extra tuition on academic performance differ from that of teachers

An inferential analysis was conducted to address the third objective comprehensively. This objective sought to establish whether the perceived effects of extra tuition on academic performance by parents differ from that of teachers

A descriptive analysis of the perception index between teachers' and parents' perception is shown on Table 18.

Table 18: Mean Perception Index between Teachers and Parents

Respondent Category	N	Mean	Std. Deviation
Teachers	40	2.130682	0.5714649
Parents	40	2.237500	0.5554148

Table 18 clearly shows that the mean perception of teachers was 2.13 with standard deviation of 0.57 while that of parents was 2.23 with standard deviation of 0.55, implying that both the teachers and parents had a favorable perception towards extra tuition.

In order to determine whether the mean differences in perception index as observed in Table 18 were statistically different, a t- test for independence of means was run to test the hypothesis which had been formulated in view of objective three which stated that; "Teachers' perception of extra tuition on academic performance does not significantly differ from that of Parents". This hypothesis was tested at a 0.05 level of significance as shown in Table 19.

Table 19: t-test for Equality of Perception Means between Teachers and Parents

	t	df	sig.(2-tailed)	Mean Difference
Equal variance assumed	-0.848	78	0.399	-0.1068182
Equal variance not assumed	-0.848	77.937	0.399	-0.1068182

From Table 19 it can be observed that there was no statistically significant difference between the perception scores of teachers and parents about extra tuition on academic performance (t (78) = -0.848, p= 0.399). This implies that the perceptions of teachers and those of the parents were statistically independent and hence the third null hypothesis which stated that: Teachers' perception of extra tuition on academic performance does not significantly differ from that of parents was accepted. The study findings implies that the mean perception of teachers was 2.13 with standard deviation of 0.57 while that of parents was 2.23 with standard deviation of 0.55 hence both parents and teachers had a favorable view towards extra tuition.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the study findings, conclusion and recommendations to an investigation on the perceived effect of extra tuition on academic performance in public secondary schools Matungulu Sub-County.

5.2 Summary of the Findings

Objective one: Determine whether the perceived effects on extra tuition on academic performance by students differ from that of teachers

Regarding the perception of teachers and students on effects of extra tuition on academic performance, it was found that most teachers (85%) and students (82%) supported the practice of extra tuition. It was also found that extra tuition helps students to cover syllabus and revise for examinations. The study established that mean perception of teachers was 2.13 while that of students was 2.22 with a standard deviation of 0.57 and 0.75 for teachers and students respectively.

Finally, the study revealed that perception scores of teachers and students were t (198) = -0.767, p=0.444 hence, statistically, there was no significance difference between the perception scores of teachers and students concerning extra tuition on academic performance. The null hypothesis that students' perception of extra tuition on academic performance does not significantly differ from that of teachers was therefore accepted.

Objective two: Establish whether the perceived effects on extra tuition on academic performance by teachers differ from that of school principals'

Concerning the perception of teachers and school principals on the effects of extra tuition on academic performance, the study found that teachers (85%) and school principals (80%) supported the practice of extra tuition. It was also found that teachers and principals made extra tuition decisions in order to boast the performance of individual students and school performance.

The study established that mean perception of teachers was 2.13 while that of principals was 2.25 with a standard deviation of 0.57 and 0.55 for teachers and principals respectively. Finally, the study revealed that perception scores of teachers and principals were t (48) = -593, p=0.556 hence, statistically, there was no significance difference between the perception scores of teachers and principals about extra tuition on academic performance. The null hypothesis that statistically there is no significant difference between the teachers' perception of extra tuition on academic performance and that of school principals was therefore accepted.

Objective three: Establish whether the perceived effects on extra tuition on academic performance by parents differ from that of teachers

Regarding the perception of teachers and parents on effects of extra tuition on academic performance, it was found that most teachers (85%) and parents (97.5%) supported the practice of extra tuition. It was further found that parents and teachers felt that extra tuition helps weak students to improve by allowing enough time for revision. The study established that mean perception of teachers was 2.13 while that of parents was 2.23 with a standard deviation of 0.57 and 0.55 for teachers and parents respectively.

Finally, the study revealed that perception scores of teachers and parents were t (78) = -848, p=0.556 hence, statistically, there was no significant difference between the perception scores of teachers and parents about extra tuition on academic performance. The null hypothesis that

statistically there is no significance difference between parents' perception of extra tuition on academic performance and that of teachers was therefore accepted.

5.3 Conclusion

Based on the findings of the study, it can be concluded that extra tuition is widely offered in schools in Matungulu Sub-County. It can also be concluded that teachers are key decision makers as regards extra tuition. From the findings, the researcher concluded that all classes are involved and work covered during tuition time is mainly syllabus coverage and revision of work already done. Most common tutoring approaches used are discussions followed by revision work. It can be concluded that extra tuition is supported by educational stakeholders' namely, principals, parents, teachers and students.

The researcher also found out that majority of the principals supported extra tuition for reasons of improving individual and school performance. It can be further concluded that extra tuition can be reduced by reducing syllabus content to manageable levels, recruitment of more teachers and effective supervision of the curriculum by school administrators and Quality Assurance Standard Officers (QASO).

The researcher also deduced that extra tuition helps teachers to address the needs of individual learners. These findings are consistent with Nyagosia, Waweru and Njuguna (2013), who pointed out that teachers in Kenya consider provision of extra tuition as an intervention strategy to cover syllabus and address the weaknesses portrayed by candidates before they take the national examinations.

Based on the statistical mean, parents and principals seemed to be more in favour of extra tuition compared to teachers and students. In view of this, it can finally be concluded that current government policy on extra tuition ban does not seem to be in force in Matungulu Sub-County and therefore there is need to streamline the practice of extra tuition in schools to make it more effective.

5.4 Recommendations

Based on the findings, the researcher recommends the following:

There is need for the government to recruit more teachers in order to increase teacher student ratio. This will help teachers to address the needs of individual learners on time and thus reduce the need for private tuition.

Supervision of teaching in schools by the Directorate of Quality Assurance and Standards should be enhanced to make principals and teachers more accountable. This will minimize time wastage and teachers will be able to cover syllabus content on time.

Schools should strive to provide adequate educational resources like textbooks to enhance syllabus coverage. At the same time syllabus content need to be reduced to allow students develop their talents and have time for leisure.

This study was only carried out in Matungulu Sub-County in Machakos County. It is therefore important that other studies be carried out in other Sub-Counties to find out the relationship between the prevalence of extra tuition and academic performance in national examinations.

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APPENDICES

Appendix I

Letter of Introduction

SOUTH EASTERN KENYA UNIVERSITY

DEPARTMENT OF EDUCATIONAL ADMINASTRATION AND PLANNING

P.O. BOX 170-90200

KITUI, KENYA.

Dear respondent,

RE: QUESTIONNAIRE ON THE EFFECTS OF EXTRA TUITION ON ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS MATUNGULU SUB-COUNTY.

I am a postgraduate student at South Eastern Kenya University pursuing a master degree in education. I am carrying out a research on the effects of extra tuition on academic performance in public secondary schools in Matungulu Sub- County. The attached questionnaire is aimed at gathering relevant information about your school in connection to the area under research. Your response will be held in strict confidence. Please complete all the sections as objectively as possible. Your co-operation will be highly appreciated. All information that will be collected in this study will be used for research purpose only. Participation in this survey is voluntary and any individual may withdraw at any time.

Yours faithfully,

Elizabeth K. Mutua.

E55/20173/2012

Appendix II

Questionnaire for form 3 Students
Questionnaire No
Introduction and Guidelines
The purpose of this questionnaire is to assist in carrying out a research on the effects of extra
tuition on academic performance in Matungulu Sub- County. Please provide answers to all the
following questions and be as accurate and honest as possible. Any information you give will be
used for academic purposes only and will be treated as confidential.
Instructions:
a. Kindly answer the questions by ticking $()$ appropriately in the spaces provided.
b. Do not write your name/name of your school anywhere in this paper.
e. De nee witte gest imme et gest seneez mig witere in mis paper.
Section A: General Information
1. What is your gender?
Male [] Female []
2. What is the category of your school?
Day [] Boarding []
Section B: Students Perception on Extra Tuition
1. Are you given extra tuition in your school outside the normal timetable?
Yes [] No []
If yes, who asks you to attend extra tuition?
Head teacher [] Teachers [] Parent [] Self []
2. What work is usually covered during extra tutoring?
Revision of work already done [] Evaluation/tests []
Coverage of the syllabus [] Practical's/experiments []

3.	In which subjects is extra tuition conducted?
4.	If you are in a position to decide, would you like extra tuition to continue being offered to students?
	Yes [] No []
	Give 3 or more reasons for your answer above.
	• • • • • • • • • • • • • • • • • • • •
5.	Which other strategy can be used to improve your performance other than extra tuition?

6. The following factors are commonly cited to explain the phenomenon of extra tuition. Please put a tick $(\sqrt{})$ in the appropriate cell. Use the following key to enter your choices.

1. Strongly agree 2. Agree 3. Undecided 4. Disagree 5. Strongly Disagree

FACTORS	1	2	3	4	5
Extra tuition will improve my mean grade					
Extra tuition improves the school overall performance					
Extra tuition helps to increase knowledge in various subjects					
Extra tuition helps in syllabus coverage					
Extra tuition helps weak students to improve in academic performance					
Extra tuition creates more learning experience					
Extra tuition provides time for inter-class discussions					
Extra tuition helps students to focus on weak subjects					
Extra tuition improves teacher student relationship					
Extra tuition allows enough time to revise for exams					
Extra tuition helps students to compete effectively in KCSE examination					

Extra tuition helps teachers to identify needs of individual learners			
Extra tuition helps students to build confidence to face national exams			
Extra tuition allows teachers to have adequate time to respond to challenging questions			
Extra tuition helps schools to compete effectively in academic performance with other schools			
Extra tuition creates disparities among learners especially if some learners are not able to afford extra tuition			
Extra tuition increases academic pressure on the learners			
Extra tuition leads to good academic results which help to build teachers' reputation to the public			
Extra tuition helps to engage learners in constructive academic activity during their free time			
Extra tuition is a source of income for teachers			
Extra tuition should be made compulsory in all schools			
Extra tuition should be scrapped altogether in schools			

Thank you for giving me this honest and sincere information.

Appendix III

Qu	estionnaire for Teachers
Qu	estionnaire No
Int	croduction and Guidelines
The	e purpose of this questionnaire is to assist in carrying out a research on the effects of extra
tuiti	ion on academic performance in Matungulu Sub-County. Please provide answers to all the
foll	owing questions and be as accurate and honest as possible. Any information you give will be
use	d for academic purposes only and will be treated as confidential.
Ins	tructions
	a. Kindly answer all questions
	b. Please respond by putting a tick $[\sqrt{\ }]$ for the information required in each item. When
	necessary you are requested to provide additional information.
1.	tion A: General Information What is your gender? Male [] Female [] How many years have you served as a teacher in this school?
۷.	Less than 5 years [] 6-10 years [] above 10 years []
Sec	tion B: Teachers perception on extra tuition.
1)	Does your school conduct extra tuition? Yes [] No []
	If yes, which classes are involved in the extra tuition? All [] Form 4 only [] Form 3&4 [] Weak students []
2)	What approach of extra tutoring do you use?
	Note taking [] Discussion [] Revision [] Assignments/exercises []
3)	In which subjects is extra tuition conducted?

4) Do	you	sup	port 1	the pr	actice	e of e	xtra	tuitio	n?					
Ye	es []			No	[]							
Give	e thre	ee re	ason	s for y	your a	answ	er ab	ove						
	• • • •				• • • • • •		• • • • •			 	 	 	 • • • • • •	

5) The following factors are commonly cited to explain the phenomenon of extra tuition. Please, put a tick $(\sqrt{})$ in the appropriate cell. Use the following key to enter your choices.

1. Strongly agree 2. Agree 3. Undecided 4. Disagree 5. Strongly disagree

FACTORS	1	2	3	4	5
Extra tuition helps to improve the mean grade of individual students					
Extra tuition improves the school overall performance					
Extra tuition helps to increase knowledge in various subjects					
Extra tuition helps in syllabus coverage					
Extra tuition helps weak students to improve in academic performance					
Extra tuition creates more learning experience					
Extra tuition provides time for inter-class discussions					
Extra tuition helps students to focus on weak subjects					
Extra tuition improves teacher student relationship					
Extra tuition allows enough time to revise for exams					
Extra tuition helps students to compete effectively in KCSE examination					
Extra tuition helps teachers to identify needs of individual learners					
Extra tuition helps students to build confidence to face national exams					
Extra tuition allows teachers adequate time to respond to challenging					
questions					
Extra tuition helps schools to compete effectively in academic performance					
with other schools					

Extra tuition creates disparities among learners especially if some learners are			
not able to afford extra tuition			
Extra tuition increases academic pressure on the learners			
Extra tuition leads to good academic results which help to build teachers'			
reputation to the public			
Extra tuition helps to engage learners in constructive academic activity during			
their free time			
Extra tuition is a source of income for teachers			
Extra tuition should be made compulsory in all schools			
Extra tuition should be scrapped altogether in schools			

Thank you for providing this honest and sincere information.

Appendix IV

Questionnaire for Principals							
Quest	tionnaire No						
	TION A: GENERAL INFORMATION What is your gender? Male [] Female []						
2.	What is the category of your school? Day [] Boarding []						
3.	How long have you been a principal in this school? Less than 1 year [] 1-5years [] 6-10years [] Over10years []						
SECT	ION B: Principals' perception on extra tuition						
1.	Does your school conduct extra tuition?						
2.	If yes, who makes extra tuition decisions in your school?						
3.	What role do you play during extra tuition?						
4.	In your own opinion, would you like extra tuition to continue being offered to students? Yes [] No []						
	Give 3 or more reasons for your answer above.						
5.	What can be done to reduce the need for extra tutoring by schools in Kenya?						

6. The following factors are commonly cited to explain the phenomenon of extra tuition. Please put a tick $(\sqrt{})$ in the appropriate cell. Use the following key to enter your choices.

1. Strongly agree 2. Agree 3. Undecided 4. Disagree 5. Strongly Disagree

FACTORS	1	2	3	4	5
Extra tuition helps to improve the mean grade of individual students					
Extra tuition improves the school overall performance					
Extra tuition helps to increase knowledge in various subjects					
Extra tuition helps in syllabus coverage					
Extra tuition helps weak students to improve in academic performance					
Extra tuition creates more learning experience					
Extra tuition provides time for inter-class discussions					
Extra tuition helps students to focus on weak subjects					
Extra tuition improves teacher student relationship					
Extra tuition allows enough time to revise for exams					
Extra tuition helps students to compete effectively in KCSE examination					
Extra tuition helps teachers to identify needs of individual learners					
Extra tuition helps students to build confidence to face national exams					
Extra tuition allows teachers adequate time to respond to challenging questions					
Extra tuition helps schools to compete effectively in performance with other					
schools					
Extra tuition creates disparities among learners especially if some learners are					
not able to afford extra tuition					
Extra tuition increases academic pressure on the learners					
Extra tuition helps to engage learners in constructive academic activity during					
their free time					
Extra tuition is a source of income for teachers					
Extra tuition should be made compulsory in all schools					
Extra tuition should be scrapped altogether in schools					
	· .		•		

Thank you for providing me with this honest and sincere information

Appendix V

_	nnaire for parents onnaire No
SECTIO	ON A: GENERAL INFORMATION
V	What is your gender?
N	Male [] Female []
SECTIO	ON B: Parents perception on extra tuition
1. D	Does your son/daughter(s) participate in extra tuition?
Y	Yes [] No []
2. V	Who decides if your son/daughter should attend/not attend tuition?
3. 1	In your own opinion does extra tuition improve academic performance of your child?
(Yes [] No [] Give three or more reasons for your answer above
•	
-	
-	
4. V	What can be done to reduce the need for extra tuition by students?

5. The following factors are commonly cited to explain the phenomenon of extra tuition. Please put a tick $(\sqrt{})$ in the appropriate cell. Use the following key to enter your choices.

1. Strongly agree 2. Agree 3. Undecided 4. Disagree 5. Strongly Disagree

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Extra tuition helps to improve the mean grade of individual students			
Extra tuition improves the school overall performance			
Extra tuition helps to increase knowledge in various subjects			
Extra tuition helps in syllabus coverage			
Extra tuition helps weak students to improve in academic performance			
Extra tuition creates more learning experience			
Extra tuition provides time for inter-class discussions			
Extra tuition helps students to focus on weak subjects			
Extra tuition improves teacher student relationship			
Extra tuition allows enough time to revise for exams			
Extra tuition helps students to compete effectively in KCSE examination			
Extra tuition helps teachers to identify needs of individual learners			
Extra tuition helps students to build confidence to face national exams			
Extra tuition allows teachers adequate time to respond to challenging			
questions			
Extra tuition helps schools to compete effectively in performance with other			
schools			
Extra tuition creates disparities among learners especially if some learners are			
not able to afford extra tuition			
Extra tuition increases academic pressure on the learners			
Extra tuition helps to engage learners in constructive academic activity during			
their free time			
Extra tuition is a source of income for teachers			
Extra tuition should be made compulsory in all schools			
Extra tuition should be scrapped altogether in schools			

Thank for providing this sincere and honest information

CONDITIONS

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





National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A 3651

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:
MS. ELIZABETH KATILE MUTUA
of SOUTH EASTERN KENYA UNIVERSITY,
32-90131 tala, has been permitted to
conduct research in Machakos County

on the topic: INVESTIGATION ON THE EFFECTS OF EXTRA TUITION ON ACADEMIC PERFORMANCE IN PUPLIC SECONDARY SCHOOLS MATUNGULU SUB-COUNTY

for the period ending: 31st October,2015

Applicant's Signature Permit No: NACOSTI/P/14/6849/4031 Date Of Issue: 18th November,2014 Fee Recieved: Ksh. 1000



Secretary
National Commission for Science,
Technology & Innovation



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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

Ref: No.

Date:

18th November, 2014

NACOSTI/P/14/6849/4031

Elizabeth Katile Mutua South Eastern Kenya University P.O. Box 170-90200 KITUI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Investigation on the effects of extra tuition on academic performance in public secondary schools Matungulu Sub County," I am pleased to inform you that you have been authorized to undertake research in Machakos County for a period ending 31st October, 2015.

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

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

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

Copy to:

The County Commissioner Machakos County.

The County Director of Education Machakos County.

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