

**FACTORS AFFECTING THE QUALITY OF EDUCATION IN DAY SECONDARY  
SCHOOLS IN KENYA: A CASE STUDY OF SCHOOLS IN BUNGOMA NORTH  
DISTRICT, BUNGOMA COUNTY."**

**BY  
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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
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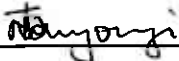
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# DECLARATION

This research project is my original work and it has never been submitted for examination or degree award in any other University.

Signed 

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Date 18 / 11 / 2012

This research project has been submitted for examination with my approval as the university supervisor.

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# DEDICATION

**This research project is dedicated to Mercy Nanjala. My daughter.**

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## LIST OF ABBREVIATIONS

<b>BOG:</b>	<b>Board of Governors</b>
<b>EPF:</b>	<b>Education Product Function</b>
<b>GNP:</b>	<b>Gross National Product</b>
<b>KCSE:</b>	<b>Kenya Certificate of Secondary Education</b>
<b>KIE:</b>	<b>Kenya Institute of Education</b>
<b>KNEC:</b>	<b>Kenya National Examination Council</b>
<b>PTA:</b>	<b>Parents' Teachers' Association</b>

## ABSTRACT

The reason behind this study was to evaluate the factors affecting quality of education in day secondary schools in Bungoma North District. The study was done in day secondary schools in Bungoma North District. The input- output relationship or Education Production Function ( EPF) was used.

The study was carried out in 10 day secondary schools. The schools were selected through purposive sampling. The instruments of data collection were questionnaires for students, teachers, and head teachers, and unstructured interviews. Data was analyzed using descriptive statistics, multiple regressions and multiple correlation analysis The SPSS statistical package was used to determine correlation and regression results. The factors that may affect performance in day secondary schools in the District are unfavorable home environment of the students for reading. These problems arose from interference from members of the family or friends, lack of reading materials at home and noise from neighbors or functions from the immediate environment. Other problems include living long distances from school, bad company at home, lack of school fees' admission of weak students and inadequate physical facilities.

This study made the following recommendations to arrest the factors that affect performance of day secondary schools in Bungoma North District. First parents should ensure that there is adequate lighting system for day secondary school students to study after school. Family members should not interfere with day secondary students during study time at home.

The government should increase bursary allocation to day secondary schools to meet the school fees demands for academically gifted but needy students. Further, there is need to in-service secondary school teachers in their area of specialization in order to enable them acquire new skills and ideas on how to handle emerging and challenging issues in education.

Therefore, this study made the following suggestions for further research. There is need to critically look at the advantages of day secondary schools in terms of cost over boarding schools in the light of introduction of free primary education by the Narc Government. This will come up

with the decision to whether continue investing more in boarding schools or in day secondary schools.

Further, there is need to evaluate the role of sponsors in sponsored schools apart from their traditional role of spiritual nourishment, they can participate in physical development and expansion, financial assistance and provision of learning and teaching resources

Finally, the parents' teachers' associations and other related bodies ought to be strengthened through a legal enactment in the education Act to reflect crucial roles they play and give them a legal backup.

# CHAPTER ONE

## 1.0 INTRODUCTION

### 1.1 Background

Educational policies of the Government of Kenya since independence have witnessed significant outcomes in the rapid expansion of the education system. The thrust for expansion particularly in secondary education in Kenya has been private demand for education. Court (1974) observed that perhaps the outstanding fact about education in Kenya has been that everyone has wanted it more than any other thing.

In the sessional paper No. 6 of 1988, enrolment in secondary schools was projected to increase up to 1, 032, 500 students by the year 2000. This rapid expansion after independence could be explained by increase in demand for more educational facilities due to the increasing population, the government's commitments to make education accessible to all Kenyans, and the pressing need for educated and trained labor force or human resources.

In the post independence period, rapid expansion in education has been attributed to double prolonged activity and co-operation between the general public and the government. Most Kenyan families consider education as a private investment promising socio-economic returns. Education of children is given a lot of priority as exemplified by readiness and enthusiasm with which the Kenyan communities have contributed funds to build new secondary schools under the National Motto of Harambee the spirit of pulling together for development. The government's commitment to increase accessibility to education is evidenced by allocation of more than 30% of the total budget on education.

The need to expand secondary education in Africa has been occasioned by the burgeoning demand thus the biggest challenge facing most African countries. Kenya is one such country that faces crisis in secondary admission each year where a total of over 250,000 miss form one chances every year. This has resulted in search for alternative form one places within and from

without as in Uganda (East African Standard 30 May, 2001. With respect to secondary education, there needs to be expansion and serious thinking on how to satisfy the burgeoning demand for admission to schools with the limited number of secondary schools places.

According to the World Bank (1988), the transition from a system of boarding schools to one of day secondary schools is another approach to reducing both the capital and the recurrent costs of the secondary education, especially when implemented in conjunction with distance education, which reduces the need for large boarding complexes at any level. A system of small day schools can significantly reduce the unit cost of secondary education.

Boarding schools are sometimes justified because they promote national unity by bringing together students from different regional and ethnic backgrounds. In addition they offer economies of scale with scale with regard to teacher utilization, and they avoid the daily commuting costs associated with day schools. But in some African countries, the housing and feeding expenses in boarding schools are as high as instructional costs, and since in many countries the extra costs are fully subsidized, boarding schools in fact shift the basic welfare costs of children from families to the public education budget. Public subsidies on education have been opposed on the basis of their distribution outcomes. Studies to this effect have revealed that the net effect of taxes and subsidies in education is to transfer income from the poor to the rich. Ballade (1978) asserts that the burden of subsidization has adverse effects on the distribution of income because high-income groups tend to remain longer in the education system than in low-income groups.

According to sessional paper No.6 of 1988, the development and maintenance of physical facilities in secondary by communities, parents and sponsors should continue to be encouraged. Their contribution is important as one of the means of expanding and maintaining quality and relevance of secondary education. The report, however, noted that day schools are cheaper to develop and to maintain and therefore proposed that communities and parents should be encouraged to develop day secondary schools and to provide them with adequate facilities and equipment to enable them maintain high standards of teaching and learning. The establishment of such day schools is a more cost-effective way of providing and expanding secondary education.

Day schools will reduce parental and community burden and enable the nation to expand accessibility to secondary education. Sessional paper No 6 further recommends that day schools should be established within reasonable walking distance.

Finally, the recent government policy on compulsory free and universal education will exert unprecedented pressure on admission places at secondary level flows occasioning more opening of day secondary schools or expanding those already existing.

## 1.2 Statement of the Problem.

This study attempted to determine factors influencing students' performance in day secondary schools and ways of improving quality of education. In Bungoma North District, of Bungoma County.

Low school quality accounts for low level of literacy and achievement among third world children (Fuller, 1986). School quality makes a substantial difference in a child's achievement if the effects of his or her pre-school and social-economic background are held constant. There is little progress made to improve schools' quality among the poorest developing nations since 1970. Even in some countries the limited quality that had been achieved over the years is being eroded (Fuller, 1986). The school quality is indicated by school characteristics, which influence student's achievement and efforts that encourage more efficient management of material inputs, by the teachers.

Individual and government expenditures per student however tend to be much higher in boarding secondary schools than in day secondary schools hence fewer places in boarding schools than day schools. To increase accessibility to secondary education in a more cost-effective way, the government and communities should be encouraged to develop day secondary schools.

### **1.3 Objectives of the Study**

In this study, the objectives were to determine:

- 1. Domestic factors affecting day secondary school students in an attempt to acquiring academic excellence.**
- 2. The school factors affecting day secondary school students in an attempt to achieve academic excellence.**
- 3. The extent to which school inputs affect the quality of education in day secondary schools as measured by examination performance.**

### **1.4 Justification of the Study**

This study provides information useful for teachers, parents, parents' teachers associations, Board of Governors, Ministry of Education, head teachers and parents on ways of improving performance of day secondary schools in Kenya. The finding of this study enables parents and communities to appreciate the problems facing day secondary schools and comes up with ways of solving the problems so as to improve the performance of schools in national examinations.

The study provides an objective assessment of the effect of school inputs in day secondary schools on student's academic achievement. This forms an evaluation of cost effectiveness of different ways of providing quality education and most likely enables the government and the communities to expand accessibility to secondary education. Conclusion reached in this study institutes further research in the area of problems facing day secondary schools both regionally and nationally.

### **1.5 Scope and Limitations.**

The study is based on schools in Bungoma North District which I considered to be representatives of all Schools in Bungoma County, since they tend to have similar features of most schools in the county such as similar enrolment ratios, comparable cut-off points on admission, equitable distribution of single sex and mixed schools. Some limitations of the study included:

- 1. The study was limited to day secondary schools of Bungoma North District**

2. The study used only KCSE results as a measure of academic achievement.
3. The study was limited to school examination performance as a measure of success.

## 1.6 Operational Definitions

1. **Day secondary schools:** The second level of educational institutions, whose students reside outside the institution and commute from home to school every school day .
2. **Kenya Certificate of Secondary Education (KCSE):** An examination that learners take at the end of the four years of secondary education in the Kenya system of education. It is this examination which determines future movement of students in the educational system.
3. **Academic achievement:** Performance and success in standardized national examinations (like the Kenya Certificate of Secondary Education) at critical stages of student's life.
4. **Cost-effectiveness Analysis:** The output achieved by combination of various inputs which can allow us to identify the least cost achieving desired level of output that can be achieved at a given cost.
5. **Quality Education:** An education system with high level of achievement and efficient management of education resources.



# CHAPTER TWO

## 2.0 LITERATURE REVIEW

### 2.1 Introduction

This chapter discusses the various factors that affect the quality of education regionally and globally using both research based recommendations as well as those based on actual corporate practices.

### 2.2. Education Quality

Education is considered as a vital political and socio-economic tool for attaining personal socio-economic, political and cultural advancements. Hence, governments in developing countries apportion higher percentages of their recurrent budgets to educations. Oluoch et al (1972) supported the argument in Kenya and reported that “The government attaches great importance to education and hence the sector receives the largest share of recurrent public sector expenditure. In 1971/1972, this amounted to about 30 million Kenya pounds or just bellows 30% of the Central Government’s Budget.

According to sessional paper No.6 of 1988 it is the government’s policy to continue expanding secondary education. But in order to undertake such expenditure in the most cost-effective way it is noted that day schools are cheaper to develop and maintain and hence proposed that communities and parents should be encouraged to develop day secondary schools and provide them with adequate facilities and equipment to enable them to maintain high standards of teaching and learning.

According to Mwiria (1985), the availability and use of teaching aids and resources in schools is ranked among the most influential factors, which affect examination Performance in secondary schools. Ayot, (1984) supported the above view when he suggests that “...all that we hear and see, we learn only about 10 % through our sense of hearing and 80% through the sense of sight. We retain 20% of all that we hear and 80% of both of what we see and hear.” Maundu (1987) argued that good performance demanded that every school be equipped with relevant textbooks.

According to the financial year 2011/2012 budget presented by Hon. Uhuru Kenyatta, M.P, Deputy Prime Minister and Minister of Finance, Public schools were given 5.3 billion to finance the Education sector which was a bigger percentage compared to other ministries. Thus education is considered to be a good asset for the country.

### 2.3. Teacher Quality

According to Kinyanjui (1979), the caliber of teachers in any school or system formed an important input variable which could have tremendous impact on school outcomes. In Kenya the language of the school is not necessarily the native language of the child, the ability of teachers to impart language skills is critical for the success of the schooling child. The teacher's role was to create a bridge between two environments with a clear objective of incorporating the student into the world of school. It is in this context that the distribution of qualified teachers should be assessed. Maundu (1986) postulates that teacher's qualifications play a significant effect on students' performance in Science and Mathematics. He attributed the good performance of the extra provincial schools to excellent instruction given by qualified teachers in addition to their inputs.

Teachers' training levels were found to have a significant effect on achievement in Brazil (Lockheed et al, 1993) and Zimbabwe (Fuller, 1987) all countries where secondary schools quality varied significantly.

Thias and Cornoy (1972) however found out in Kenya that at upper secondary, teachers' experience showed no significant effect on students' performance. Hnuschek's (1989) study in Malaysia concluded that the length of teachers' experience was associated to students' performance but only amongst highly qualified teachers. Out of 23 studies which had been done on teacher experience up to 1986, 13 showed no significant effect on students' performance (Fuller, 1986).

In Kenya right now for anybody to become a public primary school head he or she must be a degree holder. This initiative has lead to many primary school teachers going back to colleges in

order to attain what is needed by the ministry of Education. Though there are many private schools where most teachers are not even trained but they are performing. Thus most private schools perform better than public schools.

## 2.4 Domestic Factors

The family practices related to later school achievement vary from within social classes. After controlling surface level indicators of family social class in Japan, and United States of America, Holloway et al, (1990) showed how the perceived legitimacy and importance of school institution held by parents and their parenting practices in the home strongly predicted school performance in a child's first five years of schooling.

Within low-income communities, parents however varied significantly in the labor demands they played on their children and their commitment. (Fuller et al 1993) in Columbia, Psacharopoulos et al (1992) reported how the amount of television viewing at home is negatively related to school achievement. Hunter (1963) claimed that in spite of the characteristic hardship of much of East African boarding schools and the poor living conditions of the day students in outside the accommodation, all boarders are assured of a bed, three meals a day and facilities for study. It is possible for a day scholar to suffer from lack of all those essentials.

Weeks (1963) found out that the chores expected of a day scholar often became downright exploitation. A student may have risen at 5.am, to fetch water, split firewood, dig in the garden, then try to get some food before walking several miles to school. After school the process begins afresh. When it is dark by 7.30pm the student now free of chores, will often have to struggle over his or her books reading by a paraffin lamp or candle which can be considered annoying to others sharing the same room.

According to castle (1966), even students living happily with their parents have to walk up to 15miles a day to and from school. In the evenings they study in very unfavorable conditions in a single crowded noisy room with poor lighting. The parents often do not realize that one meal a day is not sufficient for young people and day schools often do not provide mid-day meals.

Most day secondary schools these days the parents or guardians are forced to pay some money to cater for lunch or in some schools they just take to schools some cereals like maize and beans which are cooked for their lunch.

## **2.5 Student Average Admission Score**

Appia (1979) found out that prior achievement had a significant positive effect on academic achievement among forty six students in Ghana. Maundu (1986) attributed poor performance in Harambee schools to poor caliber of students admitted in those schools. Maundu concluded that the previous good academic performance had a positive effect on future student achievement. In Kenya the pass marks for secondary School admission is 250 marks and above in the Kenya Certificate of Primary school Examination. As if this is only applicable to boarding schools because most day secondary schools admit students with less than that pass mark unless a student has attained a high mark but is unable to join the boarding school which he has been called upon to join, such a student will join the day secondary school because the fees is affordable. Surprisingly students who join such schools with less marks end up performing better than those who join with high marks.

## **2.6 Influence of Head Teachers Qualification and Experience.**

Eshiwani (1984) study showed that head teacher's are instrumental in performance in secondary schools for they monitor closely all activities in their school. Maundu (1986) recommended the need to set minimum level of experience a teacher should acquire before being promoted to school leadership. This ensures effectiveness in job /performance. A study by Heyneman and Loxlay (1983) in Indonesia showed high association between student performance and head teacher's experience. Loxlay (1984) however, found out that formal training of head teacher had no effect on student performance in secondary schools in Botswana. Similar findings by Loxlay (1984) were reported by Jacoboson et al (1976) in Bolivian secondary schools.

Far from this there are so many private schools headed by individuals who are not yet trained but such schools perform better than those schools which are headed by highly qualified personnel.

To some extent such highly qualified personnel claim to have taught for quiet some long time hence claim to be experienced but they don't perform to their expectations.

## 2.7 Conceptual Framework

There is little consensus in the definition and measurement of inputs and output of education. However, the issue seems to be in the lack of agreed goals of education that can be translated to operational and measurable objectives, hence there are no standardized units of outputs or inputs. Therefore, inputs are books and other learning materials, teachers' qualification and experience, teacher student ration, school physical plants, laboratory equipment and output this is the student's achievement.

In this study quality measures such as teachers' experience and qualification, teacher student ratio, laboratory equipment and books and other learning resources in Bungoma North Day Secondary Schools were used as inputs. The specific measures of output are the grades attained by each day secondary school of Bungoma North District in the Kenya Certificate of Secondary Education national examination. The problem about the input measures is the qualitative dimensions of the inputs which is hard to define and difficult to measure.

The quality of the output of educational system is measured by examinations of given standards. Other school outputs include discipline and good citizenry. Examination results allows for easy comparison. A good school is the one with higher points or scores in examinations and they are judged to be of high quality. It can be pointed out rightly that there is more to educational process than competence in cognitive prowess. This study however used this measure, as it is the best known and acceptable measure of output quality.

## 2.8 Hypothesis

To guide the study in an attempt to meet the stated objectives, the hypothesis that 'there were no unique factors affecting the day secondary schools education quality, performance and quality' was used and any statistical test was at  $\alpha$  0.05.

## CHAPTER THREE

### 3.0. RESEARCH METHODS

#### 3.1 Research Design

The study used the Descriptive research design and the ex-post design. Descriptive research seeks to find answers to questions through the analysis of variables relationships what factors seem to be systematically associated with certain occurrences, conditions, or types of behavior.

Since it is often impractical to arrange occurrences, an analysis of what actually does happen is the sly feasible way to study causation. For example we cannot arrange fatal automobile accidents in order to study their causes. But we can study conditions associated with them.

Ex-post facto Research is widely and appropriately used in the behavioral sciences. In education, since it is impossible, impractical or unthinkable to manipulate such variables as aptitude, intelligence, personality traits, cultural deprivation, teacher's competence and some variables that might present an unacceptable threat to human being, this method was the right model for this study. It requires a proper employment and cautious interpretation to provide a useful methodology for the development of knowledge.

#### 3.2 Study Site

The study is to be done in Bungoma North District of Bungoma County in Western Province, Kenya. The Bungoma County covers an area of 2,704 square kilometers and it is divided into several Districts namely Kimilili Bungoma District, Bungoma Central District, Bungoma West District, Bungoma South District Bungoma North District, Bungoma East District and Mt Elgon District. The County has a population of about 10,000,000 people. The majority dwellers in the community are the Luhya who make up 99% of the total population. They mostly practice Agriculture and livestock keeping. They basically inhabit the county. There were two major factories namely Pan paper Mills at Webuye and Nzoia Sugar Factory at Nzoia.

The people in the county attach great importance to education achievement to enhance employment opportunities for their children in the modern economic sector. Education is viewed as the only vehicle of socio-economic mobility due to unstable resource base. Bungoma North District has three divisions namely; Tongaren, Ndalul and Naitiri.

### 3.3 Data Types

The proposed study used both primary and secondary data. The primary data was sourced from the field through field interviews and observations. The variables on which primary data was sought included biodata of students and teachers and factors (school based and domestic) affecting education quality in Bungoma North District. The secondary data was the 2008, 2009, 2010 and 2011 KCSE results for schools in Bungoma North District which was sourced from the D.E.O's office, Bungoma North District.

### 3.4 Data Collection.

#### 3.4 .1 Target Population and Sample Size Determination

All the 10 head teachers of the day schools participated in the study, 5 teachers and 20- students were selected from each school depending on the school size using random sampling procedure thus translating into 10 head teachers, 50 teachers and 200 students,

#### 3.4.2. Data Collection Instruments.

Data was collected using three questionnaires and unstructured interviews. The interviews were conducted through discussions with the head teachers. I preferred the informal approach to other techniques because I felt that it would create a free atmosphere hence encouraged complete response from the respondents.

The first questionnaire was the Teachers information on school quality designed for all the 50 teachers who participated in the study it sought information about teachers' experience and qualification, some of the school and home environmental problems and the position of teaching and learning resources in their schools.

The second questionnaire was the head teacher's questionnaire on factors of school quality designed for all the 10 head teachers who participated in the study. It sought information about the number of students admitted to the universities in 2008, 2009, 2010 and 2011 and school performance in examination, teachers' qualification and experience, physical facilities available and the role of Parents' Teachers' Association to school development and general management of the school.

The third questionnaire was the students' home and academic information questionnaire it sought information about student home and environmental factors that affect their academic performance, the activities they engage in apart from their homework as factors contributing to the negative performance of day secondary schools

#### 3.4.3 Sampling Procedure

To obtain the sample data from teachers, head teachers and students in day secondary schools in Bungoma north, three lists on teachers, head teachers, and students by schools were prepared. From each list, the required numbers of respondents were selected using simple random sampling technique where papers with yes or no labels were placed in 'pot' and potential respondents allowed to draw. For each yes draw, the potential respondent was included in the sample data and the no draw was excluded from being the potential respondent from the sample data.

For the sample data on students, the head teachers or their deputies was asked to introduce the researcher to the students explaining the purpose of the study. The questionnaires were then given to those students who were again selected using simple random technique as explained in the case of teachers' selection. The respondents were asked to respond to the questions without assistance from colleagues under the supervision of the researcher to retain control and to limit missing responses.

The student's home and academic information questionnaire had thirteen (13) items administered to 200 students and touched on student's home environmental factors affecting their academic



performance, the activities they do at home apart from homework, factors affecting K.C.S.E performance, the type of lighting they use. Only 191 questionnaires were returned representing 95.5% of the total questionnaires sent to students.

The teacher's information on school quality questionnaires involved 50 teachers. This touched on teacher's qualification, and experience what should be done to improve KCSE performance in their school, where they stay, (8) items were used. Out of 50 questionnaires only 43 were returned representing 86% return rate of the total questionnaires sent or given.

All the 10 head teachers were involved. The questionnaires touched on school KCSE performance the number of students going to the university in 2008, 2009 and 2010, student's admission score, teacher's qualification and experience. All the 10 head teachers returned the questionnaires representing 100% return rate of the total questionnaires sent or given.

The researcher held unstructured interviews with all the 10 head teachers on matters pertaining to ways of improving KCSE performance and the way forward of the whole district. Thus the unscheduled interviews intended to target 10 heads of secondary day schools. The interviews were done in a frank and friendly atmosphere to elicit maximum and useful responses from the head teachers.

### **3.5 Data Processing and Analysis**

The sample data from the field were first numbered and then coded resulting in a data entry book. The resulting data template was used to create a digital data file in SPSS and Excel. The resulting data file was subjected to quality assessment in terms of accuracy precision and completeness.

To generate information from the sample data file, descriptive and inferential statistical procedures were used where descriptive procedures were to measure distribution tendencies (aggregation and dispersion) in the sample data for accurate description. The descriptive

techniques used were frequency tabulation and graphing to provide information on the expected factors affecting performance in the secondary schools and their variations given the home and the school environments, respectively. From the frequency analyses results, the variables required in giving indications of associations and differences in the sample data distributions were identified for cross tabulation analyses. The variables used in the cross tabulations were students average admission score; head teachers qualification and experience; teacher pupil ratio and; the distance from school.

The resulting descriptive information from frequency analyses and cross tabulations analyses were then used to make decisions on which inferential statistical procedure (Parametric or non-parametric) was most appropriate in generalization with regards to measuring association or differences at stated confidence level.

In association, the study used (Spearman's) rank correlation coefficients measures of strength of association while regression analysis (linear or non-linear) was used to measure dependence of performance on school or domestic factors (independent variables). For difference measure the study used both parametric (student's t and ANOVA) and non-parametric (Mann-Whitney U and Kruskal-Wallis H) statistics at  $\alpha$  0.05.

# CHAPTER FOUR

## 4.0. RESULTS AND INTERPRETATION

### 4.1. Introduction

This chapter covers results of data analysis and their interpretations with regard to the study questions, objectives and hypotheses. Any inferential statistical result has been interpreted given  $\alpha = 0.05$ .

### 4.2. Domestic Factors Affecting Students Performance in KCSE

Domestic factors are factors that are related to the household or the family. They affect students from home. They are caused by the home environment thus by the parents neighbors or generally the environment itself.

When students are sent away from school for various reasons, they miss valuable learning time. This contributes to poor performance of the students during national examination. When students were asked to list the factors that contributed to negative performance of their schools in Kenya Certificate of Secondary Education, Chronic absenteeism of students from school due to fee balances had the highest percentage (51.9%) inadequate facilities was the next serious (31.4%) problem faced by the day school students as shown on table 4.1.

Laxity of teachers and students accounted for (5.9%) and lack of discipline by students accounted for (10.8%) of the factors contributing to the negative performance in KCSE. Inadequate school fees could be explained by the fact that since the district has limited resources. Quite a number of students rely on working parents or relatives for their school fees, who for one reason or another do not pay school fees in time. Most head teachers have no alternatives but to send students home to bring school fees balances so as to enable their schools to run. Other parents depend on payments from Mumias and Nzoia sugar companies and the little they make from the farming they practice.

Lack of adequate facilities was the secondary biggest hindrance to good performance in the secondary day schools in the district.

**Table 4.1. Factors contributing to the negative performance in KCSE education**

Factor		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laxity of teachers and students	11	5.8	5.9	5.9
	Undisciplined students	20	10.5	10.8	16.7
	Inadequate facilities	58	30.4	31.4	48.1
	Chronic absenteeism of students from school due to fee	96	50.3	51.9	100.0
	Total	185	96.7	100	
Missing	System	6	3.1		
	Total	191	100		

On factors that could improve the quality of education in day secondary schools, the students suggested that adequate facilities should be provided (38.4%) as shown in the table 4.2 co-operation between students, teachers and parents (29.7%) students should not be sent home for fees (15.1%). Provision of lunch and boarding facilities, (9.7%), Provision of qualified and experienced teachers (7.0%) as shown on table 4.2.

**Table 4.2. Suggestions to improve the KCSE education performance in school**

Suggestions		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Provision of lunch and boarding facilities	18	9.4	9.7	9.7
	Co-operation btw students, teachers and parents	55	28.8	29.7	39.5
	Provision of qualified and qualified teachers	13	6.8	7.0	46.5
	Adequate facilities should be provided	71	37.2	38.4	84.9
	Students should not be sent home for fees	28	14.7	15.1	100
	Total	185	96.9	100	
Missing	System	6	3.1		
	Total	191	100		

Table 4.3. Shows that only (3.7%) of the students used electricity for reading at home. This is due to lack of electricity in most parts of the district. A bigger percentage (80.1%) use kerosene lamp for their studies, while (6.3%) use pressure lamp and (9.9%) use candles for lighting during their studies which is risky because they can cause fire if left carelessly thus the students can be caught up with sleep then leave the candle burning without their knowledge hence accidents of fire.

Table 4.3 type of lighting used at home

Type of lighting	frequency	percent	Valid percent	Cumulative percent
Candles	19	9.9	9.9	9.9
Pressure lamps	12	6.3	6.3	16.2
Electricity	7	3.7	3.7	19.9
Kerosene lamp	153	80.1	80.1	100.0
Total	191	100.0	100.0	

Table 4.4 Responsibilities of students at home

Responsibility		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nothing	12	6.3	6.3	6.3
	Engage in casual work to earn money for the family or self	14	7.3	7.3	13.6
	Working in the family farm or business	73	38.2	38.2	51.8
	Cooking and cleaning the house and the compound	92	48.2	48.2	100
	Total	191	100	100	
Missing	System	0	0		
	Total	191	100		

Students in boarding schools concentrate on their school work during preps while the day scholar's students do other chores at their homes apart from homework as shown on Table 4.4 other work done at home included cooking and cleaning the house and the compound (48.2%) working in the family farm or business (38.2%). Engaging in casual work to earn money for the family or self (7.3%). The smallest percentage chose nothing (6.3%) it is just because maybe they did not understand the question because most of them even reading and understanding English is a problem. Weeks (1963) found out that chores expected of a day scholars students by

parents or guardians are often excessive and downright exploitation. The work done by day students while at home impacted negatively on the performance in the Kenya certificate of secondary examination.

**Table 4.5 (a) Problems faced by day students**

Problems listed in order of priority by day school students.

Problems		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unfavorable climate conditions	21	11.0	11.0	11.0
	Teachers are harsh on students	3	1.6	1.6	12.6
	Staying far from school leading to lateness	77	40.3	40.3	52.9
	Poverty	24	12.6	12.6	65.4
	Poor roads	2	1.0	1.0	66.5
	Poor lighting at home	7	3.7	3.7	70.2
	Little time to carry out personal revision	5	2.6	2.6	72.8
	Lack of fuel	12	6.3	6.3	79.1
	Insecurity	8	4.2	4.2	83.2
	Inadequate time to study	2	1.0	1.0	84.3
	Inadequate facilities	22	11.5	11.5	95.8
	Hostility from parents	2	1.0	1.0	96.9
	Absenteeism	3	1.6	1.6	98.4
	A lot of responsibilities at home	1	0.5	0.5	99
	Missing	2	1.0	1.0	100
Total	191	100	100		

Table 4.5(b)

Problems		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unfavorable climate conditions	12	6.3	6.3	6.3
	Teachers are harsh on students	2	1.0	1.0	7.3
	Staying far from school leading to lateness	50	26.2	26.2	33.5
	Poverty	16	8.4	8.4	41.9
	Poor roads	10	5.2	5.2	47.1
	Poor lighting at home	4	2.1	2.1	49.2
	Little time to carry out personal revision	9	4.7	4.7	53.9
	Lack of sufficient basic funds	1	5	5	54.5
	Lack of school fees	3	1.6	1.6	56.0
	Lack of fuel	20	10.5	10.5	66.5
	Insecurity	9	4.7	4.7	71.2
	Inadequate time to study	2	1.0	1.0	72.2
	Inadequate facilities	24	12.6	12.6	83.8
	Hostility from parents	2	1.0	1.0	84.8
	Accidents along the way to school	9	4.7	4.7	89.5
	A lot of responsibilities at home	17	8.9	8.9	89.4
Missing	3	1.6	1.6	100	
Total	191	100	100		



Table 4.5 (c)

Problems		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unfavorable climate conditions	24	12.6	12.6	12.6
	Too much work at home that can lead to poor performance	4	2.1	2.1	14.7
	Teachers are harsh on students	3	1.6	1.6	16.2
	Staying far from school leading to lateness	1	0.5	0.5	16.7
	Poverty	16	8.4	8.4	25.1
	Poor roads	8	4.2	4.2	29.3
	Poor lighting at home	3	1.6	1.6	30.9
	Little time to carry out personal revision	3	1.6	1.6	32.5
	Lack of school fees	2	1.0	1.0	33.5
	Lack of fuel	32	16.8	16.8	50.3
	Interference from guardians	3	1.6	1.6	51.9
	Insecurity	2	1.0	1.0	52.9
	Inadequate facilities	23	12.0	12.0	64.9
	Hostility from parents	7	3.7	3.7	68.6
	A lot of responsibilities at home	14	7.3	7.3	75.9
Missing	46	24.1	24.1	100	
Total	191	100	100		

Table 4.5 (d)

Problems		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unfavorable climate conditions	1	0.5	0.5	0.5
	Too much work at home that can lead to poor performance	1	0.5	0.5	1.0
	Teachers are harsh on students	7	3.7	3.7	4.7
	Staying far from school leading to lateness	4	2.1	2.1	6.8
	Poverty	11	5.8	5.8	12.6
	Poor roads	2	1.0	1.0	13.6
	Poor lighting at home	3	1.6	1.6	15.2
	Poor communication	1	0.5	0.5	15.7
	Peer influence	5	2.6	2.6	18.3
	Little time to carry out personal revision	2	1.0	1.0	19.4
	Lack of fuel	8	4.2	4.2	23.6
	Inadequate facilities	7	3.7	3.7	27.2
	Hostility from parents	2	1.0	1.0	28.3
	A lot of responsibilities at home	1	0.5	0.5	28.8
	Missing	136	71.2	71.2	100
Total	191	100	100		

Poor lighting was the big problem facing day scholar students (46.7%) as indicated by the students on table 4.5. They also lack enough reading materials and space (15.1%) in some schools students are expected to leave school books when going home. While other students indicated that they used their friends' text books while in school and when left for home, had nothing to use. Similarly day school students face problems of interference from the family members or friends (19.5%) noise from the neighboring or functions in the neighborhood,

hunger, loneliness, disturbances from mosquitoes, scared by wizards, thieves or witches while studying at home.

Table 4.6 how students get lunch during school time

Ways		Frequency	Percent
Valid	The school provides	179	93.7
	Return home for lunch	6	3.1
	Buy	6	3.1
	Total	191	100.0

Table 4.6 shows sources of lunch for students. Lunch was a problem as some students stated that they bought lunch (3.1%) went back home for lunch (3.1%). They may lack the energy to read and participate in games, but quite a big group said the school provides which is better (93.7%). This factor was included in the domestic factors because lunch is counted as part of fees in most schools. Thus it is provided by the parents or the guardians.

Home environment greatly affected day school students. Home environment being uncondusive for reading was the greatest problem faced by day school students. The other was long distances from school and bad company at home, lack of proper diet, lack of good accommodation at home among others see on table 4.7.

Table 4.7 Problems faced by students while studying at home.

Problem		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Noise from the neighboring or functions in the neighborhood	6	3.1	3.2	3.2
	Interference from the family members/friends	36	18.8	19.5	22.7
	Lack of reading materials	27	14.1	14.6	37.3
	Poor lighting	88	46.1	47.6	84.9
	Lack of reading space	28	14.7	15.1	100
	Total	185	96.9	100	
Missing	System	6	3.1		
	Total	191	100		

Most students have the problem on fee payment because of one reason or another thus some depend on sponsor's well-wishers guardians and a great number depends on parents as shown on table 4.8.

**Table 4.8 Payment of school fees**

		Frequency	Percent
Valid	Sponsors	2	1.0
	Well-wishers	11	5.8
	Guardian	47	24.6
	Parents	117	61.3
	Total	177	92.7
Total		191	100.0

Table 4.8 and 4.9 shows that some students fail to perform well in the Kenya national examination because they lack their parents, thus they stay worried because of being mishandled by the step parents, hence leading to their not performing well.

**Table 4.9 Parents alive.**

		Frequency	Percent
Valid	No	55	28.8
	Yes	131	68.6
	Total	186	97.4
Total		191	100.0

**Table 4.10. Missing parents**

Missing		Frequency	Percent
Valid	Mother	30	15.7
	Father	35	18.3
	Total	65	34.0
Missing	System	126	66.0
Total		191	100.0

The age also affects performance in the Kenya national examination as shown on table 4.11 thus when people are out taken by time thus time needed to be in school, they seem not to produce best as expected by the ministry of education,. Table 4.11 shows that there are some students who are passed school going age (15.7%).

**Table 4.11 Age of students.**

Age		Frequency	Percent
Valid	> 21yrs	30	15.7
	19-20yrs	35	18.3
	15-18yrs	104	54.5
	11-14yrs	6	3.1
	<10yrs	6	3.1
	Total	181	94.8
Missing	System	10	5.2
Total		191	100.0

**Table 4.12 Gender**

Gender	frequency	percent	Valid percent	Cumulative percent
Female	72	37.7	37.7	37.7
Male	119	62.3	62.3	100.0
Total	191	100.0	100.0	

Table 4.12 shows that the males are more in number in the schools where study was conducted indicating that girls drop out of school at primary level due to reasons known by themselves e.g. early pregnancies, search of jobs to sustain siblings as maids

.Currently table 4.13 shows that most day schools in Bungoma North are mixed (91.15) which could also be a problem affecting girls schooling thus at the age between 12-21 boys and girls

are active whereby they want to explore and know what is good and bad. They are eager to know why they are told not to do some things as pertains girls and boys and hence as shown in the table 4.13 because they interact, they end up doing things unexpected like boy girl relationships leading to premarital sex which at the end disadvantages the girl child because of pregnancy. She ends up dropping out of school leaving the boy to continue with the education. Very few schools are purely boys and girls schools (3.2%) and (5.8%) respectively.

**Table 4.13 Nature of school**

		Frequency	Percent
Valid	Day Boys	6	3.1
	Day Girls	11	5.8
	Day mixed	173	90.6
	Total	190	99.5
Total		191	100.0



### **4.3. School Factors Affecting Students Performance in KCSE**

These are factors that affect the students basing on the school environment. Thus they are either caused by the students themselves while at school, teachers or the facilities at school that are used by the students.

One of the issues that came up during the study was that students move from one day school to another. This occurred after the students accumulated a lot of school fees balance in their present's school and avoid paying the balance they sought admission in other day schools. It was possible as a result of day schools being quite close to each other in urban centers or in heavily populated rural areas.

Since most day schools especially in the urban areas were competing for students from private schools, they were readily accepting students without the normal admission procedure like obtaining a letter from previous schools. Such students who transferred to new schools started paying fees, minus the fee arrears accumulated in the previous schools. Parents or guardians of such students always find it cheaper for their sons or daughters to transfer to other day schools.

Some teachers noted that most students who were admitted to form one, never studied up to form four in the same school. Those who did form four came from other schools with varied back grounds leading to decline in performance in Kenya certificate of secondary education examination.

The other problems cited by head teachers as facing day secondary schools was the strong belief that boarding secondary schools were better than day secondary schools to most students according to head teachers carrying a suit case and boarding a vehicle to a distant school was more prestigious than attending a nearby day secondary school. Hence students who attended day school next to their home were always viewed as failures by the community or peers.

The head teachers also admitted that some parents took their children to day secondary school for a while as they looked for places in boarding schools. Even the head teachers themselves asked by the researcher whether they would like to have their children learning in day secondary schools, they also wanted their children to be admitted to boarding secondary schools.

It was difficult to ensure day secondary students study at home after school. Hence this affects KCSE performance of day secondary school students. In boarding schools, preps time can be supervised by teachers to ensure that students are studying in their endeavor to promote good KCSE performance in day secondary school, head teachers had put in place measures such as early reporting to school by 7.10am for one hour compulsory preps up to 8.10am in the evening, there was compulsory one hour and fifty minutes preps from 4.30pm to 6.20pm. In some schools, teachers were encouraged to give homework assignment and respective teachers checked completion of the assignments, and those who failed studying while at home.

Other methods included provisions of lunch at an extra cost. In some schools, it was compulsory that either the students buy lunch because head teachers felt a lot of time could be saved for students.

Another problem faced by day secondary schools in the district was the admission to form one of weak students from the nearby primary schools. The admission was done after national, provincial and other district boarding schools had selected the best students in the Kenya certificate of primary education. In order to fill their classes, the head teachers had to admit any student to form one even though some of those students performed poorly in Kenya certificate of primary education. Those students who failed in Kenya certificate primary education are unlikely to produce good performance in Kenya certificate of secondary education.

The other problem cited by the head teachers as facing secondary schools was the unfair promotion of the head teachers in the district. Some head teachers suggested that a teacher should only be promoted to a head of department or deputyship or a head teacher only after being a good classroom teacher. This was important because such a head teacher would be able to advise other teachers on how to improve their teaching techniques. Other teachers claimed that there was corruption within the district, provincial and national offices in the promotion of head teachers.

Political interference was also a problem cited by the head teachers politicians wanted favors from schools such as being given contracts at inflated prices, having their relatives in schools without paying schools fees or being given financial favors by schools under the guise of being able to protect head teachers. However, with changed political environment and with the publication of the public officers ethnics Act 2003 and anti- corruption measures the new government has put in place, it was hoped that such interference as cited above will wane and would be discouraged altogether.

#### **4.4. Effects of School Inputs on Quality of Education in Day Secondary Schools**

This study involved 50 teachers from 10 secondary day schools in Bungoma North District graduate trained teachers responded to the questionnaire with a 53.5% comprising 23 teachers. Followed by the postgraduate who were 8 with a 18.6%. Diploma holders were the next who were 7 with a 16.3%. In both trained teachers added up to a percentage of 88.4% only 11.6% being untrained teachers.

The untrained teachers included untrained graduate and untrained from six. Majority of untrained teachers were teaching science languages and technical subjects. There was a big shortage of teachers in the area of study.

**Table 4.14 highest level of professional training**

Level		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Untrained form six	4	9.3	9.3	9.3
	Untrained graduate	1	2.3	2.3	11.6
	SI or Diploma in Education	7	16.3	16.3	27.9
	Trained graduate	23	53.5	53.5	81.4
	Postgraduate	8	18.6	18.6	100
	Total	43	100	100	

Majority of teachers who responded to the item on years of teaching experience had 1-4 years teaching experience. Most of the teachers who had 11-15 years teaching experience were on senior grades and either placed as heads of department or deputies or head teachers and were to be found in big schools and in urban centers. That's why only 4.7% of the teachers who were evolved in the study had taught for over 15 years.

The majority of teachers had not attended in-service courses. In service source are important because they give teachers fresh ideas on how to handle new concepts or syllabus. Poorly in-serviced teachers feel incompetent and threatened by new innovations (Kathuri, 1986). The comprehensive nature of the 8-4-4 education. Curriculum demands a new breed of teachers with thorough grounding on theoretical and applied knowledge of the subjects to be taught, hence the need to in-service teachers. Some teachers complained of the un co-operative students and hostile communities around their teaching stations.

Another problem facing teachers in day secondary schools in the district is inadequacy of instructional materials or resources. The availability and use of instructional materials of resources ranked amongst the most influential factors that affect examination performance in

secondary schools. Most teachers complained of inadequate teaching resources of which most of them were teaching sciences. Sciences are a core- requirement under the 8-4-4 system of education.

Another problem was enrolment of weak students in form one. This according to teachers made their work a bit difficult as weak students are never serious with their school work.

**Table 4.15 the period of teaching in secondary school by teachers**

Period	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Over 15 years	2	4.7	4.7	4.7
11-15 years	5	11.6	11.6	16.3
5-10 years	9	20.9	20.9	37.2
1-4 years	21	48.8	48.8	86.0
Less than a year	6	14.0	14.0	100
Total	43	100	100	

From the table below it can be seen that majority of teachers 65.1% thus 28 of the total number who responded to the item on distance lived between 1-3 kilometers from the school only 27.9% of the teachers lived in the school compound with 7% living over 7 kilometers. About 27.9% of the teachers lived between 4-6 kilometers from school.

Most teachers did not have houses within the school compound. They either walked to school or used public vehicles to school. Since quite a number of teachers commuted to school they encountered problems as congestions in public vehicles high transport costs and unpredictable weather and hence reported to school late, hence leading to poor performance in the Kenya certificate of secondary education.

**Table 4.16 housing facility in school for teachers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	31	72.1	72.1	72.1
	No	12	27.9	27.9	100.0
	Total	43	100	100	

According to most teachers 60.5% it is absenteeism of students from school that causes low performance in the national examination. This is probably because of lack of school fees or the students missing going to school because of the several chores that they do at home which at times makes them too tired to go to school. This was a big problem to teachers since it disrupted the teaching programmed for teachers.

**Table 4.17 the cause of low performance in day secondary school**

Cause	frequency	percent	Valid percent	Cumulative percent
Home environment contributing to indiscipline.	3	7.0	7.0	7.0
Poor administrative qualities of head teachers	2	4.7	4.7	11.6
Poor attitude of students towards education	4	9.3	9.3	20.9
Admission of weak students	8	18.6	18.6	39.5
Absenteeism of students from school	26	60.5	60.5	100.0
Total	43	100.0	100.0	

Teachers were also asked to state what should be done to improve the performance in the Kenya certificate of secondary education and majority of them (52.4%) cited on giving poor students bursaries to avoid chronic absenteeism from school, followed by building hostels for students thus they recommend boarding schools to the day schools given chance to choose between the two, they could go for boarding schools. Hunter (1963) claimed that in spite of the characteristic hardship of much of east African boarding schools and the poor living conditions of the day

students in outside the accommodation, all boarders were assured of a bed, three meals a day and facilities for study.

Building teachers house in the school compound could help improve results and providing lunch for students. Other problems teachers in day secondary schools faced included lack of teaching materials, poor pay, student's indiscipline, laxity and poor accommodation.

#### 4.5. Head teachers' information on factors affecting performance

Most day secondary schools in the district have not been performing well in the Kenya certificate of secondary education. No day secondary school under the study was among the top ten schools in the district. In 2008, 2009 and 2010 in the KCSE Examination (Bungoma District Education Office). That means that 100% of the top ten schools in the district were boarding schools.

The 10 day secondary schools surveyed managed to take to the public university only 5% students in the years 2008. This performance was below average. In 2009 they only managed to take 7% of the students to the university same to 2010. This means the performance generally in a day secondary schools is below the national average, where approximately 60.5% of the students who sit for KCSE are admitted to the local public universities admission to the state's universities was used as a criterion, since the state universities are the most accessible since subsidized loan facilities are available to the successful students. 50% thus out of the 10 schools surveyed never sent even a single students to the university in the year 2008, in 2009 2 schools out of the 10 thus 20% never sent even a single student to university while in the year 2010, three schools out of the 10 thus 30% never took even a single student to the university.

Table 4.18 Number of students who went to the university in the year 2008

Students	frequency	percent	Valid percent	Cumulative percent
6-10 students	1	10.0	10.0	10.0
1-5 students	4	40.0	40.0	50.0
None	5	50.0	50.0	100.0
Total	10	100.0	100.0	

The majority 70% of the head teachers under the study were trained graduates none had diploma qualification while 30% were post graduates. It can therefore be concluded that most head teachers were professionally qualified.

**Table 4.19 level of professional qualification**

Qualification	Frequency	percent	Valid percent	Cumulative percent
Trained graduate	7	70	70	70
Post graduate	3	30	30	100
Total	10	100	100	

Also the majority (60%) of the head teachers had less than 10 years of experience as head teachers. 10% had 11-15 years while also 10% of the head teachers had an experience of over 15 years. Thus to say that most of them did not have a long experience as head teachers.

**Table 4.20 period worked as a head teacher**

Period	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Over 15 years	1	10.0	10.0	10.0
	11-15 years	1	10.0	10.0	20.0
	5-10 years	3	30.0	30.0	50.0
	1-4 years	3	30.0	30.0	80.0
	Less than a year	2	20.0	20.0	100.0
	Total	10	100	100	

For effective administrative purposes, head teachers should be housed in school thus should have a house within the school compound. Out of the 10 day school 7 or 70% were not housed in the compound. However, 3 or 30% of them were housed within the school compounds.



In most of the 10 day secondary school under the study there was at least a shortage of teachers in an area of specialization 54% of the schools had a shortage of science teachers, while 25% of the schools had a shortage of language with 8% having a shortage in business subjects while 10% were lacking technical subject teachers. 3% lower had shortage in arts teachers. The shortage of science and language teachers is a national problem and therefore not unique to day secondary schools in Bungoma North District. The shortage of teachers in the science subjects could be given as a reason for poor performance. In science subjects in day secondary schools in the district. Several day secondary school head teachers engaged 8-4-4 thus students from form four or university students on holiday to teach the science subjects to alleviate the shortage of science teachers.

Table 4.21 schools under study

School code	School size	No. of teachers	Teacher-pupil ration	location	Average admission score	School age	KCSE Average
A	141	11	12.8	Rural	250	50	4.99
B	85	11	7.7	Rural	180	40	4.44
C	53	11	4.8	Rural	170	40	5.39
D	434	10	43.4	Rural	230	30	6.00
E	147	10	14.7	Rural	230	10	5.40
F	205	17	12.0	Rural	220	10	6.06
G	231	8	28.8	Rural	200	10	4.36
H	231	10	23.1	Urban	250	25	4.08
I	206	8	25.8	Rural	250	16	5.76
J	518	26	25.8	rural	250	20	3.81
Average	225.1	12.2	19.89		223	25.1	5.029

Schools with large sizes are located in urban setting. They attract students with higher marks in Kenya Certificate of Primary Education. This could be the reasons why the urban schools were performing better than rural schools in the Kenya Certificate of Secondary Education.

There are some schools which had very few teachers and students as observed by the researcher. Some schools had very few students in each form and teachers for various subjects were posted by The teachers service commission (TSC) to each various subjects when the teacher pupil ratio is low, it means the government is spending more money per student thereby making those schools uneconomical.

The average teacher- pupil ratio in the district was very low compared to the required 30. Even if the teacher – pupil ratio was low, the district was still lacking teachers in sciences and languages as stated earlier. This could be explained by the fact that schools had an excess number of arts teachers. However, the excess number of arts teachers is slowly running out.

Physical facilities in day secondary schools were lacking especially in the rural day secondary schools 5 schools out of 10 under the study had laboratories, out of which 2 of them had one laboratory. A school should have at least 2 laboratories. For teaching biological and physical sciences. Ideally a school should have 3 laboratories for teaching physics, biology and chemistry since each of the discipline need different sets of equipment and facilities. In a situation where a school has only one laboratory students do not have enough time to do experiments and practical's, let alone time to familiarize themselves with the laboratory equipment. Only 3 day secondary schools under the study had more than one laboratory.

Out of the 5 day secondary schools with laboratories only 2 had well equipped laboratories. The majority of those, one had poorly equipped laboratories with only 2 schools having equipped laboratories. 5 schools had no laboratories and when the researcher asked the head teachers how they did their practical examinations she was told that they always sat for their practical examinations in a neighboring school. That according to the head teachers it affected student's performance in the science subjects since they were handling some apparatus for the first time on the examinations day.

There were only 3 day secondary schools with home science rooms out of the 10 schools. 4 were offering home science as a subject. Out of the 3 schools with home science rooms, two had poorly equipped home science rooms with one having a well equipped home science room. There was no music room in all the 10 day secondary schools, though 2 schools were offering music as a subject. Agriculture workshops were only available in two day secondary schools, through all the 10 day secondary schools were offering agriculture as a subject.

From the above, it can be concluded that a large number of day secondary schools in the district could not effectively offer practical oriented subjects, in line with the objectives of the 8-4-4 education system because of lack of physical facilities.

Only 4 of the day secondary schools surveyed had libraries with only 2 schools being well equipped while other two were poorly equipped. Majority of the day secondary schools (6) had no library or bookstore.

Most of the schools had enough textbooks for their classes at most students sharing a text book per three. This could have been because the government provided money for text books. Though students were wishing that everybody could have his/her own textbook per subject. For meaningful learning to take place, necessary textbooks especially in mathematics and languages should be shared between two students at most.

As seen in table below lack of adequate facilities was the biggest. 40% contribute to the negative performance of day secondary schools as identified by the head teachers. Even teachers and students identified inadequate facilities as a major stumbling block to good performance in the Kenya certificate of secondary education.

The other problems as shown in the table were admission of weak students with 10% irregular attendance of teachers at 30%. Home environment contributing to indiscipline at 20%. Other problems were lack of qualified and experienced teachers and boy girl relationships between the students.

Table 4.22 factors contributing to negative performance in KCSE

Factors	Frequency	Percent	Valid Percent	Cumulative Percent
Home environment contributing to indiscipline	2	20%	20%	20%
Admission of weak students	1	10%	10%	30%
Irregular attendance of teachers	3	30%	30%	60%
Inadequate facilities	4	40%	40%	100%
Total	10	100%	100%	

#### **4.6 Linear multiple correlation on how school inputs affect quality of education**

Linear multiple correlation was used to analyze the data on school inputs. This was to establish the extent to which the independent variables (school inputs) affect the dependent variable (performance). The correlation ranges from -1.0 to 1.0 that means a correlation can be positive or negative.

A higher absolute value of correlation coefficient indicates a close relationship between the independent variable and dependent variable. While a small value indicates a less definite relationship.

The inputs used in the study were teacher-pupil ratio, student average admission score, head teachers qualification and experience, laboratory instructional materials, Parents Teachers Association (PTA) and other school related bodies contributions and teachers qualification and experience. Those school inputs were used as independent variables, while performance was used as a dependent variable.

Using SPSS, the correlation coefficient between the independent variables were obtained. Parents Teachers Association and other school related bodies and instructional material supplied had the highest correlation coefficient with performance. Their correlation coefficients were 0.764 and 0.732 respectively. Both the correlations were significant at 0.001 confidence level in a one tailed test.

Schools which had supplied more instructional materials, and who's Parents Teachers Associations and other school related bodies contributed to development of various schools performed better in national examinations. The other school related bodies a part from Parents Teachers Association which contributed to the development of day secondary schools in Bungoma North District were Board of Governors, school sponsors and old students association. Other bodies were District Development Committees (DDCs), Lion club, Jomo Kenyatta Foundations, British Council and the Giant groups.

Out of the 10-day secondary schools under the study, 9 had Parents Teachers Association, 10 had Board of Governors while 9 schools had sponsors. Only one day school had old student association which was established before 1975. Since the majority of day secondary schools in the district were established in the 1980's they did not have old student association. The main sponsors of most of the day secondary schools were churches. Those churches were mainly Friends church, Anglican Church of Kenya (ACK) and the Catholic Church. The high correlation between parents' teachers association and other school related bodies with performance could be explained by the fact that those bodies organized harambees to boost the day secondary schools in the district. Their contributions included constructions of laboratories, classrooms, Teachers' houses and buying of laboratory equipment. School sponsors in addition, gave spiritual nourishment to the students.

Functions of the parents' teachers' association, board of governors and the school sponsors in day secondary schools were; discussion of development projects, Kenya certificate of education results and students discipline. The other function were to organize harambees for school development organize parents and prize giving days to discuss strikes or projects which need funds. Head teachers and board of governors should start the old students associations in day secondary schools. This can enable them attract funds from their old students who may be in well placed positions in the country.

The higher correlation (0.732 significant at 0.001 confidence level in a one tailed test) between instructional materials supplied and performance meant that day secondary schools which supplied more instructional materials performed well in the national examination. As mentioned earlier, only 4 or 40% of the day secondary schools had libraries with only two schools being well equipped and the other were poorly equipped.

There was also a high correlation between laboratory expenditure supplied with performance. The correlation coefficient was 0.592 significant at 0.01 confidence level in a one tailed best. It

can be concluded that day secondary schools which spent more money in purchasing laboratory equipment performed better than those schools which spent less money.

Laboratory equipments were lacking in most day secondary schools in the district. This meant that day secondary schools could not offer practical oriented subjects, in line with the objectives of 8-4-4 education system, since there was a high correlation between day schools performance and laboratory equipment supplied. Schools should strive to buy more laboratory equipment supplied. Schools should strive to buy more laboratory equipment and chemicals to improve their performance especially in the sciences which are compulsory in the 8-4-4 education system. Purchasing necessary equipment will mean that day schools will not borrow equipments as mentioned earlier.

There was a correlation of 0.522 between average admission and performance. It can be deduced that schools which attracted students with high marks in Kenya Certificate of Primary Education tend to perform better in the national examinations. This correlation analysis results concurred with the descriptive statistics on teachers and head teachers' questionnaires. The admission of weak students was a great hindrance to good performance in day secondary schools in the district. Teachers and head teachers gave it as their first priority as one of the factors contributing to negative performance in day secondary schools in Bungoma North district.

As stated earlier when interviewing head teachers, the admission of weak students was due to the fact that day secondary schools, most of them from harambee schools, select the students after national, provincial and other district boarding secondary schools had selected first. Since they had limited catchments areas, compared to boarding schools.

There was a negative correlation between teacher-pupil ratio and performance. The correlation was -0.078 it can be deduced that day secondary with low teacher-pupil ration tended to perform

better than those with a high teacher-pupil ratio. Though the district generally had a low teacher-pupil ratio. Most of the districts day secondary schools, still lacked teachers in the sciences, languages and technical subjects as mentioned earlier.

This low teacher-pupil ratio could be explained by the fact that there are many teachers teaching the liberal arts. May be those day secondary schools with high teacher-pupil ratio had a shortage of teachers in sciences and languages, thus affecting the performance of those schools in the subjects. In some day schools in the study, a science teacher was expected to teach up to 28 lessons a week instead of the required 24 lessons making them ineffective.

Parents' teachers' association and other school related bodies had a high correlation with other school inputs. It had a correlation of 0.861 and 0.752 with laboratory equipment expenditure and instructional material supplied respectively. Both the correlations were significant at 0.01 confidence level in a one tailed test. It can be concluded that schools which had a lot of contributions from parents' teachers' association and other school related bodies tended to spend more money buying laboratory equipment and instructional materials. In order to improve performance of day secondary schools. There is need to strengthen the parents teachers association and other related bodies so that they could contribute to purchasing enough school facilities and equipment.

Schools with strong parents' teachers' association and other school-related bodies tended to attract students with high average admission score. The correlation coefficient between students average admission score and parents' teachers' association and other school related bodies contribution was 0.621 significant at 0.01 confidence level in a one tailed test. The high correlation between average admission score and parents' teachers' association and other school related bodies contributions could be explained by the fact that since those secondary schools which had high contribution from parents' teachers' association' tended to perform better in national examinations.



Those day schools also attracted students with high average admission scores. It can also be concluded that those day secondary schools which spent more money on laboratory equipment tended also to spend more money on purchasing instructional materials. There was a high correlation coefficient of 0.654 between laboratory equipment expenditure and instructional material supplied and the correlation was significant at 0.01 confidence level in a one-tailed test.

Table 4.22 linear multiple regression analysis for school input of day secondary schools in Bungoma north district.

N=10

Multiple R=-0.894

R squared=0.671

Standard Error=4.2086

Analysis of variance

	DF	Sum of squares	Mean square
Regression	6	398.104	66.3011
Residual	11	194.836	17.7124

F=3.746

Sig F=0.028

	B	SEB	Beta	T	Sig. T
Teacher-pupil ration	-0.148	0.0839	-0.3640	-1.760	0.1062
Admission score	0.3405	0.2251	3.941	1.512	0.1586
Head teachers' experience	0.0260	0.0457	0.1174	0.457	0.5809
Lab expenditure	0.0158	0.0235	0.2048	0.675	0.5138
Instructional material	0.0388	0.0221	0.4481	1.759	0.1063
Teacher experience	0.053	0.0644	0.2021	0.825	0.4270
Constant	43.745	10.3679		4.219	0.0014

The equation for the regression analysis was as below

$$P=a+bX_1+cX_2+dX_3+eX_4+fX_5+gX_6+\dots\dots$$

Where P= Performance

X<sub>1</sub>=Teacher-pupil ration

X<sub>2</sub>=Student average admission score

X<sub>3</sub>=Head teachers' experience

X<sub>4</sub>=laboratory expenditure

X<sub>5</sub>=Instructional material supplied

X<sub>6</sub>=Teacher' qualification and experience

a = a constant

b,c,d,e,f and g= regression coefficients

#### 4.7 Stepwise regression analysis

In a stepwise regression analysis, independent variables are added into the equation model one by one and at each stage any variable which is already included in the model, but whose extra sum of squares contributions had declined to a non significant level is eliminated, selection stops when all unused variables are non-significant and all included variables significant at 0.05 level in a two tailed test.

According to the data, head teachers experiences were not statistically significant in the regression model at 0.05 confidence level in a two tailed test. From the stepwise regression analysis, head teachers' experience and qualification were eliminated from the regression model. By the fact that all head teachers from day secondary schools under the study were qualified and majority had many years of experience. Even teachers from almost all day secondary schools

were qualified that means there was a little co-variation in teachers and head teachers qualifications and experience in day secondary schools in the district

Table 4.23 stepwise multiple regression analysis for school inputs of day secondary schools in Bungoma north district

N=10

Multiple R =0.82350

R Squared=0.67203

Standard Error=4.8190

Analysis of variables

	Sum of squares	Mean square
Regression 4	392.348	78.5743
Residual 9	200.670	16.8148

variable	B	SEB	Beta	T	Sig. T
Teacher- pupil ratio	-0.1261	0.8812	0.32421	-711	0.1208
Admission score	0.32530	0.22330	0.37224	1.570	0.1770
Lab expenditure	0.05173	0.3086	0.24126	2.018	0.077
Instructional material	0.05173	0.3086	0.49271	2.018	0.077
constant	45.3935	9.8172		4.760	0.0106

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter deals with the summary of the research findings, makes conclusions of the study and makes recommendations and suggestions for further study.

#### 5.2. Summary

The data on student's respondents indicated that performance of day secondary school students in Bungoma North district was significantly affected by chronic absenteeism of students from school because of lack of school fees and lack of adequate teaching and learning resources as shown in the tables. This was reinforced by data from the responses of teachers, admission of weak students and absenteeism of students from school to be the major case of the negative performance of day secondary school students in the Kenya certificate of secondary education examination.

Facilities like laboratory equipment, textbooks and other instructional materials supplied was a major factor affecting the performance of day secondary schools in Bungoma North district. The findings concurs with the findings of Heyneman (1984), Ayot and Olembo (1984) and Maundu (1987). Those secondary schools that spent more finances on purchasing necessary and supplementary textbooks and other instructional materials performed better in the Kenya certificate of secondary education examination.

Laboratory equipment affected performance. This finding agrees with findings of Ayot (1984); Ayot and Olembo (1984), Eshiwani (1983), and Twoli (1986).

The student's average admission score affected performance of day secondary school students. A high percentage of teachers and head teachers contributed to negative performance of day secondary schools in the district.

From the multiple correlation analysis there was a correlation of 0.520 between students average admission score and performance. The regressions coefficient of the average admissions score with performance was 0.360. These findings concur with findings of Appia (1979) in Ghana and Maundu (1986) which found a positive correlation between students average admission score and performance.

Home environment that was conducive to reading was the other factor affecting performance of day secondary schools in Bungoma North District. Day secondary school students faced a number of problems while studying at home as shown in table.

The problems include inference from members of the family or friends, a lot of work at home, noise from neighbors or functions in the immediate environment and lack of good lighting system. This concurred with findings of Hunter (1963), weeks (1963) and Castle (1996).

Other problems facing day secondary school students included staying long distances from school, bad company at home and poor accommodation at homes. Castle 1966 found out from his study that some day students even walk up to 15 miles a day to and from school. Further, he found out that some students in day secondary schools studied in unfavorable conditions in single crowded noisy rooms with poor lighting.

This study also found that larger classes had a negative effect on performance of day secondary students in the district. The teacher pupil ratio had a negative correlation with performance. The correlation was 0.052. The regression coefficient between teacher – pupil ratio and performance was 0.328. This finding concur with findings of Beebout (1972) in Malaysia, Jamison (1982) and youdi (1971), but differs with Jimenex and Cox (1989) who found no relationship between performance and size in class in Columbia and higher achievement in larger classes in Tanzania secondary schools.

The Kenyan situation experience large classes due to awarding of free education policy the Narc government gave in 2004. It is possible teacher – pupil ratios have a negative effect on performance.

Teachers' experience and qualification was not statistically significant at 0.05 confidence level in a two tailed test hence eliminated from the regression model. Therefore, teachers' qualification and experience has a lesser effect on day secondary school performance in the district. This is because the district is properly staffed and had experienced teachers. The findings concurred with those of Thias and Carnoy (1972) from 23 studies conducted on teacher experience up to 1986, 13 showed no significant effect on the pupil performance Filler (1986). However, Kinyanjui (1979), Maundu (1986), Lockheed et al (1993), Hanusheck (1989) and Jinnize et al (1988) found a significant relationship between teachers' qualification and experience on performance of secondary school students.

Head teachers' qualification also and experience was eliminated from the regression model as it had no significant effect on performance. All head teachers of day secondary school were qualified. Therefore there was little co-variation between head teachers' qualification and experience among day secondary schools in the district. This study concurred with the findings of Jaconson et al (1973) in Balivian secondary schools at Loxley (1984). However, other studies showed great co-variation between head teachers' qualification and experience and found significant correlation between head teachers' qualification and experience with performance, Maundu (1986), Heyman and Loxley (1983) and Eshiwani (1984).

## 5.2. Conclusion

Basing on the key findings and the major objectives of the study, the following conclusions were made;

Many factors influence the student's achievement in day secondary schools in Bungoma North District.

Among the factors was chronic absenteeism of students from schools due to lack of school fees, inadequate physical facilities such as instructional materials and laboratory equipment and admission of weak students to form one. The other was the home environment of the students which was not good for reading. At home interference from members of the family of friends, lack of good lighting, lack of reading materials, noise from neighbors or functions in the neighborhoods and a lot of work at home were found as major problem hindering day secondary students from studying.

Similarly, other problems were bad company at home, staying long distances from school and lack of proper accommodation at home especially day secondary students studying in urban schools.

Those day secondary schools in the district which supplied more laboratory equipment performed better in the national examination. Teachers and head teachers noted that performance of students in day secondary schools were affected by the admission of weak students. Those students who scored high marks in Kenya certificate of primary education were admitted to boarding secondary schools. Boarding secondary schools had a wider catchment area than day secondary schools as day secondary schools selection was limited to nearby schools especially in rural areas where students had to walk to and from school.

The average students' admission score had high correlation with performance. This study found out that parent' teachers' association and other school related bodies had the highest correlation with performance. The correlation was 0.734 and it was significant at 0.05 confidence levels in a one tailed test schools with a strong PTA and other related bodies performed better in national

examinations. These bodies had put up many facilities in day secondary schools in the district. These bodies also ensured the good running of day secondary schools.

### **5.3. Recommendations**

#### **5.3.1 Policy Recommendations.**

The following recommendations were made from the study. Although the schools fees is not paid in by students on time, the head teachers should minimize sending of students home for schools fees as chronic absenteeism of students from schools affected performance negatively. The head teachers ought to agree with parents through the PTA meetings on how parents could pay schools fees in order to minimize the sending of students due to schools fees problems.

The parents should ensure that there is adequate lighting for day secondary students to study after school. Members of the family, friends and neighbors of day secondary school students should recognize that the students need enough space for reading and therefore ought not to interfere with them when doing private studies at home.

The government should continue to give bursaries to academically gifted but needy students in day secondary schools.

There is need to in-service the teachers in the field to enable them acquire the skills and ideas on how to handle emerging issues in education and challenges.

There is need for the government colleges and universities to train more teachers to teach sciences, languages and technical subjects in secondary schools in Kenya. This will alleviate the acute shortage of such teachers particularly in physics, chemistry and mathematics in Bungoma North district and the entire country.



The government should regulate the establishment of new day secondary schools with an aim of increasing their number in line with its policy of free and compulsory primary education. Alternatively the present ones in rural areas should be filled up to capacity since some of them were started by various clans, so it is possible to find some day secondary schools quite close to each other due to clan rivalry. Hence, are not fully utilized, this is uneconomical due to low teacher- pupil ration.

Parents should be educated to assign light chores today secondary school students while at home as a lot of work makes them too tired to do their school assignments.

Day secondary schools in Bungoma North district should put up houses for head teachers and their deputies for effective administration hence improvement of performance of day secondary schools. Teacher houses should be given priority too.

There is need for parents to give enough pocket money to day secondary school students to enable them buy lunch and other schools requirements. There is always the danger of day secondary school students spending their study time at home doing casual jobs in order to earn money if they are not given enough pocket money. This could derail their academic performance.

There is need to ensure that students transfer from one school to another is coordinated through clearance procedures whereby his/her previous school issues a clearance certificate to avoid students leaving behind a lot of fee arrears. This will discourage the movement from one day secondary school to another so that continuity in teaching could be enhanced.

Head teachers should be promoted on merit only. A teacher should only be promoted after proven classroom record. A good classroom teacher would be able to advise other teachers on how to improve on their teaching techniques hence improving performance.

The parents' teachers' associations and other school related bodies ought to be strengthened through legal enactment in the education Act to reflect crucial roles they play and give them legal back up. The provision of more physical facilities in day secondary schools will make them attract students with higher average scores in Kenya certificate of primary education. Besides, parents should shoulder much on the financial burdens related to provision of learning and teaching resources in day secondary schools.

### 5.3.2 Recommendations for further studies

There is need to critically look at the advantages of day secondary schools in terms of cost over boarding secondary schools particularly now that the government has declared free primary schooling. Hence there is need to justifiably look at expansion of day secondary schools in Kenya or whether we should invest more in expansion of boarding secondary schools.

There is need to evaluate the role of sponsors in schooling a part from their traditional role of spiritual nourishment they are supposed to actively invest in physical expansion, learning and resources provision in the schools they sponsor.

There is need to look at the performance of girls and boys in day secondary schools in Kenya. The study will unravel discrepancies in performance between girls and boys in day secondary schools.

There is need to study whether day secondary schools are critically prepared to handle the emerging issues in education like HIV/AIDS and the computer education.

There is need to study the type of school inputs that affect performance in day private schools and public boarding secondary schools in Kenya. This will suggest which input in authority investing is more by policy makers in the above –cited categories.

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## APPENDICES

### Appendix 1: Introduction letter

To: Respondent

From: Teresa Nekesa Wanyonyi

Dear Sir/Madam,

#### **SUBJECT: RESEARCH PROJECT**

I am pursuing a Master of Education (M.ED) Program at The University of Nairobi. In measurements and evaluation, department of Educational Psychology.

As partial fulfillment of the award of the degree, am currently conducting a Research on the Factors that affect the quality of education in Day secondary schools in Bungoma North District.

Your school is one of the schools that were selected for this study, I humbly request for your valuable time in assisting to complete the attached questionnaire. The information you provide in this study will be treated with utmost confidentiality and will not be used for any other purpose apart from its intended academic use. I hereby undertake not to make direct reference to your name in any presentation or report thereto the study.

I would appreciate any additional information, in the form of suggestions and comments, which you deem necessary to make my research findings more conclusive, relevant and reflective of the study area. A copy of the research report will be availed to the respondents upon request.

Thank you in advance.

Yours faithfully,

Teresa wanyonyi.

# Appendix 11: Authorization Letter

REPUBLIC OF KENYA



## NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

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Fax: 254-020-318245, 318249  
When replying please quote  
secretary@ncst.go.ke

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

Our Ref: **NCST/RCD/14/012/545**

Date: **23<sup>rd</sup> May 2012**

**Teresa Nekesa Wanyonyi**  
University of Nairobi  
P.O.Box 30197-00100  
Nairobi.

### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Factors affecting the quality of education in day secondary schools in Kenya: A case study of schools in Bungoma North District, Bungoma County,"* I am pleased to inform you that you have been authorized to undertake research in Bungoma North District for a period ending 30<sup>th</sup> May, 2013.

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

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

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

Copy to:

The District Commissioner  
The District Education Officer  
Bungoma North District.

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

# Appendix 111: Questionnaire for students

Factors Affecting Quality of Education in Day Secondary Schools in Bungoma North District, Bungoma County.

The information you give will be strictly confidential.

## Instructions

Please respond to all questions honestly and accurately as possible. Please tick(√) against the information(s) most applicable to you.

### A) Biodata

1. What is the type of your school?  
(a)Public   
(b)Private
  
2. Your School is?  
(a) Day mixed   
(b) Day girls'   
(c) Day boys'
  
3. Gender  
(a)Male   
(b)Female
  
4. What is your age (in years)?
  
5. Are both of your parents alive  
Yes [  ]      No [  ]
  
6. If No. in above who is missing

Father [ ] Mother [ ] Both [ ]

7. Who pays your school fees

Parents [ ]

Guardian [ ]

Well-wishers [ ]

Sponsors [ ]

**B) Factors Affecting Quality of Education**

8. List (in order of priority) problems you face as a day school student?

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9. How do you get your lunch during school time?

(a) Buy

(b) Do not eat

(c) Return home for lunch

(d) Carry from home

(e) The school provides

(f) From friends

**Domestic factors**

10. Which problems do you face while studying at home?

(a) Lack of reading space

(b) Poor lighting

(c) Lack of reading materials

(d) Interference from the family members/friends

(e) Noise from the neighboring or functions in the neighborhood

11. Which work do you do at home?

- (a) Cooking and cleaning the house and the compound
- (b) Working in the family farm or business
- (c) Looking after your young siblings
- (d) Engage in casual work to earn money for the family or self
- (e) Nothing

12. What type of lighting do you use at home?

- (a) Kerosene lamp
- (b) Electricity
- (c) Pressure lamp
- (d) Candles

**D. Other factors**

13. What do you think should be done to improve the Kenya Certificate of Secondary School Education Performance in your school?

- (a) Students should not be sent home for school fees.
- (b) Adequate facilities should be provided
- (c) Provision of qualified and qualified teachers
- (d) Co-operation between students, teachers and parents
- (e) Provision of lunch and boarding facilities.

14. What do you think are the factors contributing to the negative performance in the Kenya Certificate of Secondary Education?

- (a) Chronic absenteeism of students from school due to fee balances
- (b) Inadequate facilities
- (c) Undisciplined students
- (d) Laxity of teachers and students
- (e) Home environment contributing to indiscipline

## Appendix 1V: Questionnaire for teachers

Factors Affecting Quality of Education in Day Secondary Schools in Bungoma North District, Bungoma County.

Please respond to all questions as honestly as possible. The information you give will be strictly confidential.

(√)Please tick against the information(s) most applicable to you.

1. What is the type of your school?
  - (a) Public
  - (b) Private
2. Your gender?
  - (a) Male
  - (b) Female
3. State the highest level of professional training you attained.
  - (a) Postgraduate
  - (b) Trained graduate
  - c ) S1 or Diploma in Education
  - (d) Untrained graduate
  - (e) Untrained form six
  - (f) Untrained form four
4. How long have you taught in secondary school?
  - (a) Less than a year
  - (b) 1 -4 years
  - (c) 5 -10 years
  - (d) 11 -15 years
5. Are you housed in school?  
Yes [  ]      No [  ]



6. If No, how far do you live from school

- a) 1 - 3 kilometers
- b) 4 - 6 kilometers
- c) Over 7 kilometers

**B Other factors**

7. What do you think is the cause of low performance in day secondary schools?

- (a) Absenteeism of students from school.
- (b) Admission of weak students
- (c) Poor attitude of students towards education
- (d) Lack of motivation
- (e) Poor administrative qualities of head teachers.
- (f) Home environment contributing to indiscipline.

8. What should be done to improve performance in the Kenya Certificate of Secondary Education in your school?

- (a) Build hostels for students.
- (b) Build houses for teachers.
- (c) Give bursaries to most poor students to avoid chronic Absenteeism.

## Appendix V: Questionnaire for Head teachers

Factors Affecting Quality of Education in Day Secondary schools in Bungoma North District.

Please respond to all questions as honestly and accurately as possible. The information you give will be strictly confidential.

(√) Please tick against the information(s) most applicable to you.

1. What is the type of your school?

(a) Public

(b) Private

2. State the nature of your school.

(a) Day mixed

(b) Day girls

(c) Day boys

3. State your level of professional qualification?

(a) Postgraduate

(b) Trained graduate.

(b) S1 or diploma in education.

(d) Untrained graduate.

(e) Untrained form six.

(f) Untrained form four.

4. For how long have you worked as a head teacher?

(a) Less than a year

(b) 1- 4 years

(c) 5- 10 years

(d) 11- 15 years

(e) 15 and above years.

5. How was the performance of your school in KCSE in 2010?

(a) Very poor

(b) Poor

(c) Below average

(d) Average

(e) Above average

(f) Good

(g) Very good

6. How many students went to the university from your school in the year?

a) 2008-----

b) 2009-----

c) 2010-----

d) 2011.....

7. What is the average admission score of students in your school? -----

8. What factors contribute to negative performance in KCSE?

(a) Inadequate facilities

(b) Irregular attendance by students

(c) Irregular attendance of teachers

(d) Lack of qualified and experienced teachers

(e) Admission of weak students

(f) Home environment contributing to indiscipline.