



The School Inputs and Quality of Education in the Private Primary Schools in Bungoma County

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ABSTRACT

The purpose of this study was to investigate the influence of the school inputs in private primary schools in determining pupils' examination performance. This was in relation to general lack of literature on school inputs in relation to performance in private primary schools in Kenya. The findings of this study showed that the quality of education and performance of pupils in examinations are determined by teacher experience, teacher qualification, the school environment, the head teacher and educational resources. The study provides a base for an evaluation of cost-effectiveness of different policies associated with school inputs aimed at improving the quality of education at primary school level. Parents and the public in general can also gain from the study; by gaining confidence in the private schools and the quality of education they provide.

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Introduction

According to Dennison (1962) Education has long been recognized as a central factor in development. When developing countries began their campaign for independence in the 1950s, education was perceived as a means not only of raising political and social consciousness but also of increasing the number of skilled workers and raising the level of trained manpower. The social benefits together with the visible gains for individuals from education stimulated an unprecedented growth of enrolment in primary schools and substantial investment in education at secondary and university level in the developing World. According to G.O.K strategic plan (2006-2011), education and training is expected to increase economic growth, enhance productivity across sectors, increase individual earnings, and enhance democracy and good governance. In Kenya, according to the 1993 Economic Survey, primary school enrolment rose from 891,533 in 6,058 schools at independence to 5,530,200 in 15,465 schools, thirty years later. Further, the Economic Survey indicated that primary enrolment increased by 1.2% from 5.46 million in 1991 to 5.53 million in 1992. Following the introduction of free primary education in 2003 enrolment increased from 5.9 million in 2002 to 7.4 million in 2004, (GOK, 2006).

The Kamunge report of 1988 attributed this remarkable increase in enrolment after independence to the steady rising social and private demand for education and training opportunities by a fast growing population (G.O.K.1988). In 1974, the government declared free primary education. This meant that it increased educational expenditure since the government had to open new primary schools, employ more teachers, and equip the schools. Within the same period the government introduced the school milk programme, which also inflated the public education expenditure (G.O.K 1982). According to the government estimate of 1987/88 financial

years, education took over 40% of the total government expenditure (G.O.K, 1986).

The private schools hire their teachers, procure learning facilities and provide education to those who can afford. The ability of these schools to meet this end depends on the quality of education. Unless various aspects of the quality of education are assessed the schools cannot be effective in providing education. The quality of education can objectively be measured by performance indicators notably, examination performance, which depends on committed school inputs (Kagia, 1984). The question of the quality of education is perhaps the center of controversy with regard to the existence and development of private schools in Kenya.

Eshiwani (1986) had earlier on categorized the private schools as either elite or low cost schools depending on their differential performance in examinations. On the quality of education offered in most private schools, Eshiwani (1986) reckoned that a more serious problem relates to the academic achievement of these schools. Despite the fact that private schools are very expensive, they provide below average facilities and teachers. This naturally leads to poor performance in national examinations. On this basis, the existence of most private schools can hardly be justified.

The quality of education offered by private schools as measured by examination performance can be determined by various factors. A study by Rutter et al (1979) in Britain indicated that the effects of school factors over pupil performance are greater when compared to either the socio-economic background of the pupil or surrounding environment. Sifuna (1989) attributed the quality of education in Kenyan schools to the educational background and training of the teachers. Eshiwani (1988) attributed the effect of pupil characteristics, school factors and teacher characteristics on pupil performance.

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The demand for primary education is evidently on the increase, on the contrary, public supply of education is on the decrease, due to the financial constraints faced by the government. The declaration of free and compulsory primary education in the year 2003 has compounded the problem. The opening of more schools to meet this demand means increased public expenditure on education. Coupled with over enrolment in the public schools with the same number of teachers, there are chances of compromising the quality of education. Using the examination performance as a measure of the quality of education, this study attempted to establish the state of teaching and learning resources in private primary schools, establish how school inputs affect the quality of education in private primary schools as measured by examination performance.

The theoretical framework employed in this study was that of the Educational Production Function (EPF). The EPF is derived from the general production function, which is used to explain the relationship between the inputs and outputs of a firm. The EPF theory postulates that educational outcomes are a function of a variety of inputs injected into the educational process. These inputs include the innate cognitive and affective endowments of the learners (i.e. raw material inputs), the physical and non - physical resources that are provided by the pupils, parents and relatives, the influence of classmates and other peers, resources provided by educational institutions and myriad other environmental factors. The EPF theory assumes that differences in quantities and qualities of school inputs are responsible for the variations in the educational outcomes.

The general EPF is expressed as;

$$A_{it} = f \{ F_i(t), S_i(t), P_i(t), I_i(t) \}.$$

Where i refers to the i th pupil, t refers to time. A denotes educational output, usually educational achievement and input categories F , S , P and I represents family inputs, peer-group effects and pre-school age abilities respectively (Simmon, 1980, p.78)

In assessing educational outcomes, the cumulative outcomes, and the cumulative effects of all the input factors should be taken into account. This study however, specifically investigated the effect of school inputs on pupils' performance in private primary schools. Taking the pupil performance in the national examinations as a dependent variable and school inputs as independent variables. An equation was developed from equation (i)

$$E = f(T, P, S, B, \dots, N) \quad (ii)$$

Where E is the examination performance, T represents teacher characteristics, P represents physical facilities, S represents pupil characteristics and B represents textbooks, N represents an otherwise undefined school variable which could also affect examination performance.

Financing of Education in Kenya

The demand and supply of education depends on other private and social costs and perceived benefits. The effective demand for education should be propelled by the expected benefits weighed against the cost involved. In Kenya, both the state and the public have made considerable efforts to meet the ever increasing private as well as social demand for education. Conversely, supply of education depends on the ability and willingness of the government and the communities in providing finances for the establishment and maintenance of educational institutions. Supply of education therefore, can

only match the demand for it, if there are enough funds at the disposal of the state and the public.

The abolition of tuition fees in 1974 in the attempt to provide free primary education also helped to increase public expenditure on education. This policy was also followed by the stoppage of the collection of building and other school funds as well introduction of free school milk in primary schools in order to improve children's nutrition and capability to learn, (G.O.K., 1982). The Free Primary school policy led to an increase of 50% in primary school enrolment and consequent increase of 38% in the number of teachers, (Mulati, 1988). The school milk programme led to a record enrolment into standard one and a concomitant increase of 8.2% of teachers and 7.5% in the number of schools, (G.O.K., 1982). Olembo (1985) in a study on the financing of education in Kenya cited the increase in teacher salary expenditure on education. Teacher's salary took nearly 90% of the education budget for primary schools and 65% of that of secondary schools, (Eshiwani, 1983). The implementation of the Waruhiu commission of 1980 and Ramntu commission of 1985 both of which recommended salary increases had colossal effects on public expenditure on education. In 2003, the government declared Free Primary Education again. Despite the programme increasing enrolment from 5.9 million in 2002 to 7.4 million in 2004, myriad challenges remained, (G.O.K., 2002), Parents did not seem to understand what constitutes 'Free Education'. The expansion of schools and constructions of new classrooms was at a standstill and the number of teachers was barely adequate to handle the extra pupils. The government did pump in 8.7 billion shillings from the exchequer and donors but the funds did not quench the learning and teaching needs of the schools. The funds fell short of individual budgets for primary schools in the country and the programme would be difficult to sustain should donors pull out. According to the government, normal children (as opposed to children with special needs) are allocated a maximum of Sh. 1,020 a year for teaching and learning material. Each school is allocated (ksh. 25,000.00) shillings for storage facilities, (G.O.K., 2006).

School Input and Quality of Education

In industrialized countries, studies have consistently shown that schools have little effect in determining academic performance as measured by quality of education, once school pre-school development and community background are taken into account; (Jencks, 1972). These reports did increase the skepticism over the wisdom of increasing school investment in developing countries. Alexander and Simmons (1975) found out from the review of studies in Western Europe, U.S.A and in the third world that, schools made little difference in raising literary and academic skills after accounting for the family background of the children and their community context. However, the subsequent decade of research within the third world yield considerable evidence that school quality makes a substantial difference, (Fuller, 1986). Another study by Rutter et.al (1979) showed that school factors are more significant in determining pupil's performance in both industrialized and developing countries; it is only the magnitude that differs and this is relevant to the current study.

Focusing on the sub-Saharan Africa, Eicher (1984) observed that the quality of education could be seen in the light of monetary indices, such as expenditure per pupil, quantity of various resources (books, desks, maps) per pupil or

classroom, pupil-teacher ratio, number of pupils per classroom and other related aspects. This approach was found relevant to this study since these indicators can easily be expressed in quantitative terms. Considering that the quality and quantity of educational resources depend on their costs, a study of the effect of these on academic performance of self-financing private primary schools is a worthy cause. Following is a review of each variable and how they affect quality of education.

Teacher Qualification and Pupils' Performance

The teacher variable is given prominence by most researchers on the determinants of pupils' performance at all levels of education. The teacher qualification expressed in terms of formal education and training shows different results when correlated to pupils' performance. Schiefbein and Farrel (1973) and Loxley and Heyneman (1983) found out that teacher qualification had a positive effect at primary level though often insignificant in regression. The studies were done in Chile and 29 low and high-income countries respectively. Heyneman (1976) found that only teachers competent in English language had a significant effect on pupil performance in Uganda's primary schools. This study used a reading test to establish the teacher effect on pupil's performance

Haron (1977) in a study of 89 schools in Malaysia found a notable correlation between the length of teacher training and pupil achievement. This factor retained its significance when entered into a multivariate model, which controlled for the effects of pupils family background and other elements of quality. The study used a comprehensive examination as a dependent variable. The use of a national examination, which is normally standardized, could have been more objective.

Studies carried out by Beebout and Juriah (1972) in Malaysia, revealed that there was positive correlation between teacher qualifications and pupil examination scores. Negative correlation was reported from Brazil and Uganda, while zero correlation was found in Kenya and Egypt and Paraguay; (Heyneman, 1980; Thias & Carnoy, 1972).

In general one would support the assertion made by Saha (1983) that;

The better-trained teachers produce better results. While there may be evidence to suggest that untrained teachers can effectively teach children literacy and numeracy, cumulative findings in these studies support the notion that trained teachers do make a difference for more advanced, especially for difficult subjects

Consequently, there is a need to establish the effect of teacher qualification on pupils' performance in private schools, which prepare pupils for terminal examinations at the primary level of education in Kenya.

Kathuri(1986) in his study on factors that affect pupil academic achievement, found a significant relationship between performance in the certificate of primary education(CPE) scores and quality of teachers as measured by their level of education and training, frequency of attendance of in-service courses and their use of modern teaching methods. The study, however, used simple correlation method, which did not take into account the interactive effects of other school inputs on pupil's performance.

A study by Eshiwani (1988) on performance in primary schools recognized the role of teacher qualification in determining pupils' performance. The study used K.C.P.E. mock examinations results as a dependent variable and school inputs as independent variables. The findings of research were

nonetheless expressed through simple relationships without elaborate statistical analysis and also the use of a national examination, which is normally standardized, could have been objective.

The Effect of Class Size and Pupil Teacher Ratio

The number of pupils per class has got some effect on pupil's performance. Fewer pupils per class mean a low pupil-teacher ratio, which improves performance Carnoy (1971) in a project carried out in Tunisia indicated that higher pupil-teacher ratio had a negative impact on pupils' performance.

The total enrolment into a school has a great impact on pupils' performance. A study by Thias and Carnoy (1972) in Kenya found out a negative relationship between school size and pupils performance in primary schools. The relationship between school size and pupils performance is not consistent and thus the need to treat the case of private schools as a different entity.

Muyoka (2004) in a newspaper review observed that with free primary education, facilities have been outstretched. In addition, lacks of enough teachers and heavy workload have demoralized teachers.

The Effect of Text Books on Pupils Performance

The positive impact of instructional materials, especially those directly related to reading and writing are consistent across several studies. Greater availability of textbooks and reading materials raises the quality of learning activities, thus increased achievement (Fuller, 1986).

Jamison et.al (1974) carried out an experimental study in Nicaragua concerning textbooks and pupils' performance. They found out that a pupil who receives textbooks scored 4% higher on mathematics post-test. However, the accuracy of such an experiment depends on the ability to control the effect of the intervening variables, which are likely to come into play between the pre-test and post-test situations.

Heyneman and Jamison (1974) found out that textbook availability had a strong influence on achievement in English among Uganda primary schools. Beebout (1972) had a similar finding in Malaysia. Schiefelbein and Farrel (1973) found positive relationship between textbooks and pupils performance in Chile. The effect of textbooks was found to be strong in rural Brazil Heyneman and Loxley (1983). In addition, Heyneman and Sepulveda-stuado (1981) concluded from studies in ten countries that academic achievement is closely correlated with textbooks availability than with other measures of school inputs.

Muya (1987) argued that a well-equipped library exposes pupils to a wide range of reading and diverse ideas capable of influencing pupils' achievement in national examinations. Eshiwani (1987) reported that schools, which usually appear in the top-ten in national examinations, had adequate textbooks. He later found a significant relationship between use and presence of textbooks and achievement in primary schools (Eshiwani, 1988).

Jokoyo (2004) argued that children of the urban rich dominate top positions in national examinations because they read more books than their counterparts in the rural and poor areas. He blamed poor performance in public schools on parents who refuse to supplement government effort to provide learning material. He observed that private academies have as many as seven textbooks for one subject, while those in public schools rely on one title. He concluded that wide reading is crucial to the overall performance of a pupil.

The Role of School Leadership and Teacher involvement on Pupils Performance

Unless the various school inputs are well organized and coordinated, very little can be achieved in the schools. The organization and management of human and physical inputs affects pupil's performance. The school's organizational structure propels the efficiency with which the inputs are managed.

The place of the head teacher is central in school management and administration. A study by Heyneman and Loxley (1983) in Indonesia found out that there was a moderate high association between pupil's performance and length of the head teacher's experience. The study recommended the need to carry out deeper investigation into specific actions the head teacher engaged in which directly affected pupil's achievement.

Another study by Heyneman and Loxley (1983) in Egypt on 60 primary schools found out that pupils performed better in schools with principals that attended more training courses and had longer teaching experience prior to becoming a principal. Morale and Pinellsiles (1977) carried out a Latin American school quality project; they found out that the principal's level of training was significantly related to pupils' achievement in Paraguay, but it should be noted that the magnitude of this effect is quite difficult to establish since the role of the head teacher is pervasive in all aspects of a school, making it hard to delineate its impact on the pupil's performance.

Maundu's (1986) study on factors affecting pupil's performance recommended the need to set a minimum level of experience a teacher should acquire before being promoted to school leadership. This ensures effectiveness in their job performance. The TSC recognized the role of the head teachers' level of training when it declared that only Bachelor of Education graduates and P1 teachers can be head teachers in secondary and primary schools respectively. This rule, however, does not apply to private schools and the effect of this on pupil performance was, therefore, pursued.

The involvement of teachers in school decision-making improves their level of motivation and dignity, which normally translates into good pupil performance. Kathuri (1986) in a study on factors that affected pupil performance recommended the need to involve teachers in the school administration through holding frequent staff-meetings. The meetings are important in the coordination of various activities in the school, be they academic or administrative. The meetings also give opportunities for the head teacher to convey useful information and teachers to air their views. The harmonious relationship between the head teacher and the teachers enhances discipline amongst pupils and thus the likelihood of better performance in the national examinations, (Kiganya, 1992). Very little had been done on the relationship between the nature of school leadership and pupil performance, especially in private schools, which operate like commercial enterprises.

Ong'ong'a (2003) observed that he owed his successes to his head teacher and teachers. Joseph Leon Ong'ong'a was the best candidate in Nyanza Province in the year 2003 KCPE with a score of 472 out of 500 marks

Were (2004) observed, head teachers must be team builders and have a good working relationship with pupils, teachers and the community. He added that heads should provide the link between the school and the education

ministry. Onyiego (2004), observed that, a head teacher must create and enforce a culture of academic excellence and the principal's role is to develop pride in a school among teachers and pupils. He asserts that head teachers should create an identity through which pupils, teachers and parents feel a special attachment to the school. However, he said that for the head to achieve that, the head must command the respect from pupils and teachers. He said that heads should teach and produce good results just as required by other teachers. He said there is a strong correlation between good teachers and good school heads. Awori (2004) observed that if a head teacher wants his /her teachers to come to school early, he/she should be the first to arrive and others will follow suit. He added that heads should identify the strengths and weaknesses of every teacher and harness the difference for the benefit of the school.

Mackenzie (2004) noted that head teachers should shun being bossy and condescend to those under them as this is a weakness and undermines their relationship with staff. He is of the opinion that heads should be prudent in financial management and ensure that funds are well accounted for. In order to succeed, the head is to instill discipline in pupils and teachers, create a warm learning environment and provide teaching and learning material. He believes that management courses for the heads should be conducted regularly to equip them with skills and expertise to run the schools.

Wagitu (2004) remarked that head teachers should be in school as much as possible, since students go on rampage when the principals are away.

Concerning private schools, the KUPPET officials (2004) lamented that, many private schools were run by untrained teachers, adding that this was why they performed poorly in the national examinations. The official insisted that professionals and not quacks that encourage candidates to cheat in the national examinations should manage the schools. He said that out of nine schools in Gucha whose KCSE results were cancelled, eight were private schools.

According to Griffin (2004), financial management has been a thorny issue, which has been "waterloo" of many head teachers. He calls for transparency, and says that lack of it is a big problem even when no coin has been misappropriated. Planning should be based on what is best for the learners. He observed that a lot of time is wasted in school over petty rows between teachers and heads. Dr. Griffin takes issue with head teachers who tether teachers to school even when they are doing nothing. He says this lowers a teacher's dignity and makes the staffroom a grumbling focal point. Dr. Griffins underlines the need to give pupils responsibilities, with checks and balances that ensure they are always on their toes. He says that responsibilities should not be confined to prefects, when spread out among many pupils as it gives them an opportunity to develop trust and competence. According to Kibet (2004), having a work force that is inspired by persuasion and personal initiative is more productive

Sister Maria Pacis (2004) noted that everybody had to be informed about what happened in the school, allowing room for consultation and that school rules should be made through consultation with pupils and teachers since this ensured that all accept them

Operation of Private Schools and Quality of Education

In Kenya there are several categories of private primary schools. There are those that basically absorb any caliber of pupils with the major objective of making profits. On the other hand there are those, which are selective and cherish academic excellence combined with profit making. The former are referred to as low-cost or commercial private schools while the latter are Elite private schools (Eshiwani, 1986).

In most countries, private schools offer better quality of education than government-maintained schools (the public schools), but in several developing countries, the public schools are of better quality, since most private schools are overcrowded and have unqualified teachers, (Psacharopoulos, 1985). However, the study was done in 1980's, the current study is to establish whether the private schools are still over crowded.

Kagia (1984) described the private schools as mere commercial enterprises, which provide no more than an education façade. The failure rate in these schools was found to be high. She attributed this poor performance to poor school inputs provided by most private schools in Kenya. However, no attempts were made in the study to establish the extent to which specific school inputs could be held responsible for examination performance in private primary Schools .

Eshiwani (1986) attributed the poor performance of most private schools to poor quality human and physical resources they procure. He argued that the private schools preferred untrained and inexperienced teachers since they are cheap to hire and fire as compared to the qualified teachers. To him, the private schools had more to do with profit making than quality of education.

A study carried out in Kisumu municipality by Ouma (1987) found out that the public schools, which were doing well in national examinations, had adequate learning facilities. Conversely, the private schools performed poorly, a situation he attributed to over-enrolment, lack of teaching facilities, low entrance behavior, lack of school fees, town influence and lack of seriousness amongst pupils from rich families. The research however did not include private schools from the rural areas and the actual effects of this variable on performance were never determined.

Research Design and Methodology

A descriptive survey design was employed for this study. According to Fraenken and Wallen (2000), surveys are the most widely used technique in education and behavioural sciences for data collection. According to Oso and Onen (2005), surveys are justifiable by considering issues of economy, rapid data collection and ability to understand population from part of it.

This study was concerned with survey of school inputs with respects to the quality of education in private primary schools as measured by examination performance.

The study was carried out in private primary schools in Bungoma County. The County had a total of twenty-five private primary schools by 2005 examination results. Ten Head teachers, 66 teachers, and 286 standard eight pupils of private primary schools in Bungoma. The questionnaire and Interview schedule were used in data collection.

The study used questionnaires and interview schedules as research instruments. To ensure face and content validity of the research instruments, experts in school of Education, Moi University were consulted. Pilot study was conducted in 2 schools and Pearson product moment correlation coefficient

was used to determine the reliability of the questionnaires at alpha level of significance of 0.05. Pearson r of 0.85 was established. Therefore the instruments were declared reliable as it was above 0.7. Both qualitative and quantitative data was collected and analyzed. Quantitative data was analyzed using descriptive statistics, correlation and regression analysis. While qualitative data was analyzed thematically.

Data Presentation and Analysis

The study established that the ages of pupils in standard eight 5(1.7%) were aged below 11 years, 26(9.1%) were aged 12 years, 111(38.8%) were aged 13 years, 90(31.5%) were aged 14 years, and 54(18.9%) were aged 15 years and above. This gives an average age of 13 years for majority of pupils in standard 8. It is likely to be attributed to the fact that parents are enlightened and hence early pupil admission.

Concerning gender, 147(51.4%) of respondents were boys and 139(48.6%) were girls. This indicates that there was a slight disparity between boys and girls enrolled in the sampled private primary schools. This is a reflection that culture and traditions are less likely to influence the schooling of children particularly the girl child.

With regard to the teachers, 51(77.3%) were male and 15(22.7%) were female. Private schools appeared to be dominated by male teachers. Male teachers were easily likely to adjust and support the school past normal working hours while female teachers were most likely to consider it an extra burden as they had extra family commitment. It may be also that private schools prefer male teachers due to continuity since female teachers may go for maternity leave and would require temporary replacement which is always costly.

Regarding the head teachers, 10(100%) were Male and 0(0%) female. It may be that there are more male teachers seeking employment than there are female teachers.

The study further established that the mothers' level of Education for private primary education pupils showed that 1 pupil (0.3%) had mothers with non-formal education, 31 pupils (10.8%) had mothers with primary education as their highest level, 131 pupils (45.8%) had mothers with secondary education, and 123 pupils (43%) had mothers with university education. Concerning fathers Education, 0 (0%) pupil had fathers with non-formal education as their highest level of education, 15 pupils (5.2%) had fathers with primary as their highest level of education, 98 pupils (34.3%) had fathers with secondary level education while, 173 pupils (60.5%) had fathers with university education. This is a clear indication that the majority of the pupils in private schools came from families with higher socio economic status. Such are the families that understand what quality education is and the kind of schools that best offered that quality education.

School inputs affecting teaching and learning in private primary schools

In terms of the classes the pupils were admitted in their respective primary private schools, it was observed that, 10 pupils (3.5%) were admitted in standard one, 19 pupils (6.6%) joined in standard two, 10 pupils (3.5%) joined in standard three, 16 pupils (5.6%) were admitted in standard four, 13 pupils (4.5%) in standard five, 53 pupils (18.5%) were admitted in standard 6, 93 pupils (32.5%) in standard seven while 72 pupils (25.2%) in standard eight.

It is apparent that most pupils in private primary schools are admitted in upper classes especially standard seven. It appeared that many parents feared to pay fees for eight years. Also it could be that pupils enrolling in the above classes were

repeaters. They prefer paying for three or less years. They therefore enroll their children in classes 6, 7 or 8 where pupils are thoroughly prepared for KCPE examinations in manageable classes. It is evident that private schools are less likely to prepare their own pupils right from standard one, but get pupils from other schools and is likely to affect their performance in KCPE. Moreover, it is likely that private schools perform above average in K.C.P.E due to intense preparation of candidates for better performance in upper classes.

Concerning games and sports in private schools, less than 20% of pupils played football, netball, handball, athletics, basketball, hockey, table tennis and lawn tennis. It is evident that it is only football and choir that experienced above 30% of pupil participation. This is a reflection that games and sports are not taken seriously in private schools. It is likely that private schools concentrate more on academic programmes than on co-curricular activities. It is also likely that there is financial implication in sponsoring games unlike in public schools where the government subsidizes education. It is also more likely that many of them are located on small compounds. This is a matter that needs to be addressed through government policy.

However it was observed that, 109(38.1%) pupils attended fieldwork in Science, 40(14%) participated in the symposia, 74(25.9%) participated in debate while 63(22%) did not participate in any activity. Field trips and symposia contribute to knowledge and enhance general understanding of academic related issues and also expose pupils to important interactions beyond school confines. It is also likely that parents support educational tours.

It was evident that in private schools, pupils liked Mathematics best, 96(33.6%) followed by Science, 56(19.6%), English 52(18.2%), GHCR 47(16.4%) then lastly Kiswahili 35(12.2%). It was evident that most pupils in private primary schools preferred mathematics to other subjects. It is more likely that best performers in mathematics end up being the best in KCPE since the other subjects are anchored on Mathematics. Private schools are likely to have this vision as they prepare candidates for examinations.

School Environmental characteristics were considered critical for learning and academic performance. They are important inputs in enhancing performance individually and in combination. The study established that 100 (35%) of the pupils observed that there were displays in the learning corners in their respective school while 186 (65%) did not have, 228(79.7%) pupils observed that their school compounds were fenced, and 58(20.3%) observed that their compounds were not fenced. This showed that private schools were security conscious.

In terms of compound beautification, 163(57%) pupils observed that in their school there were flower beds while 123(43%) pupils observed that there were no flower beds. With respect to adequacy of toilets, 232(81.1%) pupils observed that there were enough toilets in their schools while 54(18.8%) observed that there were not enough toilets in their schools. This is an indication that most of the private schools had enough toilets, which is very good in terms of hygiene and for supporting learning and teaching environment.

Having, flower beds, sizeable classrooms, enough toilets achieved more than 50% yes. It can therefore be concluded that private schools are adequately catered for in having fenced compounds, flower beds, enough toilets, and sizeable

classrooms and were below average only in having displays in the learning corners. This is an indication of a conducive environment for learning and teaching.

Concerning text books provided by the private schools, schools provided relevant books, 165 (57.7%), there were adequate desks 175(61.2%), the syllabus was always completed by midterm second term, 223(78%), there was coaching / extra tuition, 258(88.8%) and pupils were always punctual for class, 246(86%). Only one factor (Fees increase) achieved less than 50%, 99(34.6%). It is more likely that school fees remains static for a while depending on the financial constraints of the community.

It meant that Private schools in the sampled schools were above average in these critical indicators that support the learning and teaching needs of the pupils and the teachers respectively, which enhanced academic performance.

The following critical factors responsible for harmonious relationship achieved above 50% yes from pupils responses: The Head teacher was in school most of the time, 247 (86.4%), head teacher created a sense of belonging to the school 245 (75.5%), there was a strong working relationship between teachers and head teachers 247(86.4%), teachers encouraged pupils to ask questions, 267(93.4%), there was a strong working relationship between teachers and pupils, 257(89.9%), teachers were punctual for class 254(88.8%) and good food given to pupils in private schools, 223(78%). This is an indication of a harmonious working relationship as shown by the responses that achieved very high percentages.

The following factors also scored above 15% from teachers responses who agreed: There was an annual increase of salary, 11 (16.7%), there was regular motivation of teachers 19(28.8%) and the rest scored below 15%. the following factors scored above 15% on teachers who disagreed: There was an annual increase of salary 14(21.2%), there was regular motivation of teachers 11(16.7%), the teachers who were neutral in the following areas scored above 15%: The head teacher created a sense of belonging to the school 12(18.2%), there was a strong working relationship between teachers and pupils 26(39.4%), there was annual increase of salary 14(21.2%), the following factors scored above 15% on those who agreed: The head teachers was in school most of the time 21(31.8%), the head teacher created a sense of belonging to the school 30(45.5%), there is a strong working relationship between head teachers and teachers 25(37.9%), there was an annual increase of salary 14(21.2%), there was regular motivation of teachers 14(21.2%), while on responses of strongly disagree, the following factors scored above 15% : The head teachers were in school most of the time 32(48.5%), the head teacher created a sense of belonging to the school 20(30.3%), there is a strong working relationship between head teachers and teachers 30(45.5%), there was an annual increase of salary 13(19.7%).

In summary, the head teacher created a sense of belonging to the school 31(47%), there was regular motivation of teachers 33(50%), a strong working relationship between teachers and pupils 39(59%), the head teacher were not in school most of the time 34(51.5%), there was no strong working relationship between head teachers and teachers 35(53.1%), there was no annual increase of salary 27(40.9%). It is likely that regular motivation of teachers, strong working relationship between teachers and pupils, presence of the head teacher in school most of the time and having a sense of belonging would impact positively on academic performance.

Concerning teaching learning resources, the following factors affecting performance in school achieved more than 50 % yes from teachers: lack of fees caused poor performance in their schools, 55(83.3%) and indiscipline among pupils 37(56.1%). More than 50 % disagreed that the following factors caused poor performance: Lack of teaching facilities 54(83.3%), poor performance 42(63.6%), Lack of trained teachers, 59(89.4%), lack of toilets 62(93.9%), cultural beliefs 49(74.2%) and poor relationship between parents and teachers, 45 (68.2%).

It is likely that indiscipline and lack of fees are the main factors that cause poor performance in private schools.

Teacher qualification in private schools was as follows: Diploma teachers on average accounted for 2.3 %, S1 1.3%, P1 77.5%, P2 3.1% and Form 4 school leavers 15.8%. The majority of the teachers were P1 holders. Most teachers teaching in Private schools were qualified teachers. This was likely due to the freezing of direct employment of P1 teachers by the government in 1998.

Quality of assessment largely depends on Inspection. Internal inspection scored (61, 92.4%) and external (53, 80.3%) scored above 50%. This is a reflection of the fact that the private primary schools are concerned with quality of teaching in their schools.

Teaching experience is a critical factor that need to be considered when looking at academic performance of Private Primary Schools. There were 26(39.4%) teachers who had taught for up to one year, a total of 49(74.2%) had taught for between one and three years and only 17(25.8%) had taught for three and more years, therefore, it is more likely that private schools go for younger teachers whom they deem to be more energetic. It is also likely that teachers who have taught for more than three years are absorbed by the TSC because of their experience.

Class size is an important aspect in learning. It determines pupil teacher interaction. The majority of private schools (70%) have less than 30 pupils in a class. This is indicative of a greater teacher pupil ratio, implying closer attention by teachers to pupils which translates to good performance.

K.C.P.E. Performances 2001-2005

School performance in National Examinations is a driving force in determining enrolment in private schools. The school with better performance tends to attract more pupils.

Table 1. K.C.P.E. Performances 2001-2005

| Year | 400-449 | 350-399 | 300-349 | 250-299 | 200-249 | 150-199 | 100-149 | total |
|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| 2001 | 1 | 10 | 21 | 12 | 10 | 4 | 1 | 59 |
| 2002 | 9 | 22 | 52 | 24 | 16 | 1 | 0 | 124 |
| 2003 | 20 | 53 | 57 | 29 | 11 | 0 | 0 | 170 |
| 2004 | 30 | 109 | 42 | 26 | 5 | 8 | 0 | 220 |
| 2005 | 40 | 120 | 66 | 23 | 8 | 2 | 0 | 259 |
| Total | 100 | 314 | 238 | 114 | 50 | 15 | 1 | 832 |
| Percent | 12.02 | 37.74 | 28.61 | 13.70 | 6.01 | 1.80 | 0.12 | 100 |

From the table 1, above it was observed that the total number of pupils who scored between 400 and 449 were 100(12.02%), between 350 and 399 were 314(37.74%), between 300 and 349 were 238(28.61%), between 250 and 299 were 114 (13.70%), between 200 and 249 were 50(6.01%), between 150 and 199 were 15(1.80%), while those who scored below 150 was 1(0.12%).

Pupils who scored below 250 marks were below average and therefore could not get competitive secondary school admission and as such are admitted in starting schools with

limited resources. While those who scored 250 marks and above were selected to proceed to form one in established schools. It is apparent that 66(7.93%) pupils scored below average in the examinations while 766(92.07%) passed the examinations. Moreover, the majority of those pupils who passed scored between 350 and 399, 314 (37.74%).

It is also apparent that the above average performance of pupils influenced enrolment in private schools: in 2001, 2002, 2003, 2004 and 2005 enrolment increased as follows 59, 124, 170, 220 and 259 respectively.

Academic and Operational Challenges Facing Private Primary Schools as Educational Institutions.

The challenges below were obtained from the interview schedule of Head teachers and teachers

Some of the major challenges facing private primary schools are as follows;

1. Management does not support teachers' development in most private schools. The management does not allow their teachers to attend in-service courses. One teacher remarked that *"we are ones worked here like donkeys with no breaks even during holidays to do our own work"*
2. Most parents transfer their children in standard 5, 6 and 7 to other schools especially to schools that have excelled in the previous examinations. As such there is no consistency in terms of teaching a pupil in most private schools.
3. There is a lot of competition, which has resulted in the mushrooming of many private schools, which has resulted in sabotaging of others through rumormongering.
4. There is a problem of maintaining teachers since the teachers are unpredictable. There is a high teacher turnover. A teacher can transfer at the crucial time of pupils' preparation like September without warning. When the government offers job opportunities through the TSC, most teachers from private schools rush for such jobs since they offer better job security than private schools.
5. They get very little support from the Ministry except for inspection. One respondent remarked that *"but we also pay taxes and these are children of tax payers and are Kenyans."*
6. The quota system of admitting pupils to National schools and county schools is a challenge to private schools.
7. It is difficult for private schools to buy text books due to high prices from sellers caused by free primary education funding.
8. Requisition from teachers in private schools take a lot of time to be acted upon and at times nothing is done therefore planning is not effective.
9. Performance is the key monitoring tool in private schools. It does not matter the methods used to achieve good results.
10. For private schools, which rent buildings, the rent is very high, the license is very expensive and with the introduction of free primary education, school fees payment is poor.
11. Textbooks are few; parents are often unwilling to buy textbooks since they assume that school fees should cater for the same.

Table 2. The correlation between performance indicators and KCPE school performance

| Performance Indicator | Pearson r | Sig. (2-tailed) |
|--|-----------|-----------------|
| Age of pupil | -.466** | .000 |
| Gender | -.018 | .765 |
| Highest level of the mothers education | .549** | .000 |
| Highest level of the fathers education | .487** | .000 |
| Class attended | -.162** | .006 |
| The class one entered in this school | -.192** | .001 |
| Relevant textbooks | -.061 | .307 |
| Adequate desks(one per pupil) | -.350** | .000 |

Table 3. Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .691 ^a | .477 | .466 | 23.89645 |

a. Predictors: (Constant), adequate desks (one per pupil), gender, enough toilets, highest level of the mothers

Table 4. Anova

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|--------|-------------------|
| Regression | 145328.586 | 6 | 24221.431 | 42.416 | .000 ^b |
| 1 Residual | 159320.220 | 279 | 571.040 | | |
| Total | 304648.806 | 285 | | | |

a. Dependent Variable: KCPE

b. Predictors: (Constant), adequate desks (one per pupil), gender, enough toilets, highest level of the mothers education, age of pupil, highest level of the fathers education

Table 5. Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| (Constant) | 340.417 | 14.668 | | 23.207 | .000 |
| age of pupil X1 | -9.039 | 1.632 | -.264 | -5.539 | .000 |
| Gender X2 | -6.450 | 2.869 | -.099 | -2.248 | .025 |
| highest level of the mothers educationX3 | 15.212 | 2.969 | .314 | 5.124 | .000 |
| highest level of the fathers education X4 | 8.273 | 3.379 | .150 | 2.449 | .015 |
| enough toilets X5 | -10.905 | 3.729 | -.131 | -2.925 | .004 |
| adequate desks(one per pupil)X6 | -15.268 | 3.000 | -.228 | -5.089 | .000 |

a. Dependent Variable: KCPE

The findings from table 2 indicated that parental level of education had moderate correlation with pupils' performance. While pupils age was positively correlated with pupils' performance.

Table 2 indicated that adequate desks (one per pupil), gender, enough toilets, and highest level of the mothers contributed 47.7 % towards pupils' performance. Table 4 indicated that

adequate desks (one per pupil), gender, enough toilets, highest level of the mothers' education, age of pupil, highest level of the fathers' education were significant predictors of pupils performance.

While table 5 provided the coefficients for the regression equation as shown below.

Pupils' KCPE performance = $-9.039X1 + -6.450X2 + 15.212X3 + 8.273X4 + -10.905X5 + -15.268X6$.

Recommendations

Arising out of the findings, the following are the recommendations:-

(i) Pupils need to join school at the right age since the study indicated that there is a negative moderate relationship between pupils' age and performance in KCPE.

(ii) Parents need to improve on their academic performance as the study indicated that there is a strong positive correlation between parental level of education and pupil's performance in KCPE.

(iii) The Kenya National examination council may need to capture pupils' transitional details from ECD and indicate the schools attended by the pupil since the research findings in this study reveal that currently the majority of private schools have not had their own pupils from standard one to standard eight. As such credit normally goes to private schools for good performance forgetting the school that prepared the candidate for the examinations.

(iv) Recruitment of teachers by the government need to be done at the end of the year or the start of the year, either in November or January. This will assist private schools to prepare their pupils for the terminal examinations without interruptions.

(v) The government may be needed to use the voucher system other than providing funds to schools to support free primary schools so that pupils will choose the schools to learn from whether public or private.

(vi) Private schools may need to be involved in co-curricula activities with the County Education Office support.

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