INFLUENCE OF PHYSICAL FACILITIES ON QUALITY PRIMARY EDUCATION IN KENYA IN POST UPE AND EFA ERA

Mackatiani Caleb Imbova
University of Nairobi, P.O. Box 30197-00100, Nairobi, Kenya

Abstract:
This paper provides a critical appraisal of quantity primary education in Kenya as motivated by universal primary education (UPE), Education for all (EFA) and millennium development goals (MDGs) and the influence quality primary education in Kenya. Globally, primary education is recognized as the cornerstone of any country with stable economy. Bearing in mind the role played by education in development, the United Nations (UN) general assembly in 1948 endorsed education as a fundamental human right. The main objective of the study was to analyze the influence of physical facilities on quality of primary education in Kenya. The paper further examined the role played by United Nations in democratization of education globally in general and Africa in particular. The paper further assessed prospects that have arisen in Kenya because of universalizing education in the world. It therefore focused on the issue of quality education after the attainment of education For All (EFA) goal and the Jomtien conference of 1990. The study surveyed the definition of quality education as advanced by United Nations Education scientific and cultural organization (UNESCO) and United Nations children education fund (UNICEF). It also analyzed challenges that arose due to upsurge of enrolment in primary schools. Particular attention was given to the crises in inputs and processes that affect the output of quality primary education. These crises are reflected in class size and physical resources that influence quality education. The paper adopted mixed method approach. Both quantitative and qualitative approaches to research were used. Descriptive survey design was used to collect data from three sets of questionnaires. The target population comprised of head teachers and teachers Kakamega County has got 800 primary schools. Using the
sampling guide developed by Krejcie and Morgan (1970), a sample size of 36 primary schools, (three per Sub County) was selected. 36 head teachers (one head teacher per school) were therefore sampled. 4 teachers per school were randomly selected from the 36 sampled primary schools. The sample size for teachers was therefore 144. The total sample size for the study was 180. This was to conform to the confidence Interval of 0.05, confidence level of 95 percent which is a Z-score of 1.96 and standard of deviation of 0.5. The reliability was estimated through use of Cranach's Alpha Coefficient using Statistical Package for Social Sciences (SPSS) version 19.0. Findings of the study are significant to Kenya in particular and sub Saharan Africa in general, as they would assist to redress challenges of quality education arising from universal primary education and education for all. The findings might help the policy formulators formulate education policies and the legal framework which are geared towards quantitative and qualitative primary education. The policy implementers would understand and appreciate education policies within which they are supposed to operate in providing effective leadership and management practices in the implementation of quality education at primary level. The entire education stakeholders would understand how to address quality issues which arise due to upsurge of enrolment. This paper is significant to the field of comparative and International education, since it provides data on what the Kenyan government is doing in promoting the development of qualitative primary education. This study has established that there is legislation to embrace qualitative free primary education. However, implementation of education policy to ensure quality is crucial. It is therefore recommended that proper structures be put in place to enable achievement of quality primary education. The study also established that the government of Kenya has set a bench mark for class enrolment as 45 pupils per class. However, due to high enrolment, physical facilities are strained and they have negatively impacted on quality primary education. It is therefore recommended that the government should actualize her obligation on provision of adequate physical facilities in primary schools. From the findings of the study, there is evidence of internal inefficiency in schools. The issue of inefficiency has not been seriously addressed by the government. It is therefore recommended that the government should come up with clear policy to redress inefficiency in primary schools.

Keywords: access, quality education, primary education, legal framework
Objectives of the study

The objectives of this study are to;
1. Investigate implementation of education policies in Kenyan primary schools.
2. Determine effect of UPE on quality primary education
3. Assess the role played by physical facilities in implementation of quality primary education in Kenya.

Hypothesis

H₀: School physical facilities do not significantly influence quality education in primary schools.

1.1 Introduction

United Nations (UN) declared education as one of the human rights in 1948. It is viewed as essential for the exercise of all human rights. Hence, it is a fundamental human right as it promotes individual freedom and empowerment and yields development benefits. With these social aspirations, education is expected to play the following roles: According to the human capital model, the function of schools is to provide learners with information and skills that will be valuable later in life (Quiggin, 1999); Education is considered as human resource (Dare, 1996) and Education has positive influence on aspects of conflict that contribute to peace building. The UN Secretary-General’s (2009) report on peace building identifies a number of priorities in conflict-affected situations. These priorities range from establishing security, building confidence in a political process, delivering initial peace dividends and expanding core national capacity.

In light of these aspirations, UN and UNESCO developed normative instruments for international legal obligation on the right to education. These instruments promote the right for every person to enjoy access to education of good quality without any discrimination. As a result, UNESCO convened a conference of African states on development of education in Addis Ababa, Ethiopia in May 1961 (UNESCO, 1961). The conference resolved to have modern African education open to all without discrimination and resolved to achieve UPE by 1980. The United Nations Assembly later adopted the convention on the rights of the child (UNCRC) on 20/11/1989. Under article 28 of the convention, it is stated that every child shall have a right to education and primary education shall be made compulsory and free to all. The 1990 global conference held in Jomtien on Education for All (EFA) addressed the issue of quality education (UNESCO, 1990). The following had to be identified as indicators of quality
education; the percentage of trained teachers in schools and their professional commitment; availability of good instructional materials and capacity of pupils and teachers to use these materials; and the extent to which general school environment is conducive for learning (UNESCO, 1993).

As in most countries worldwide, Sub-Saharan African countries are striving to build their own human capital. This can help them compete for jobs and investments in the increasingly globalized world. The ambitions and aspirations of Sub-Saharan African countries and their youth far exceed this basic goal. In recent years, educational access has risen sharply across Sub-Saharan Africa. Many Sub-Saharan African governments have introduced free primary education (FPE) policy. Following the introduction of FPE, many countries have experienced high enrolments in primary schools. Alongside this quantitative push; is the growing awareness of the need to make sure that students learn and acquire the skills needed for life and work. The goal of learning and completion of primary education is central objective of education policy in sub-Saharan Africa, to which all countries of the region committed themselves to 1990 Jomtien, 2000 Dakar and the 2000MDGs for achieving UPE by 2015.

In addition to access, good quality education is an important means of achieving many of the other development goals (Sifuna & Sawamura, 2008). Therefore, the focus on getting African children into school has recently expanded to ensure that the quality of their learning experience improves as enrollments expand. In many schools in Africa, the learning achievement is so low that after several years of schooling, the students still have not obtained basic literacy and numeracy skills (ADEA, 2005). Although FPE policies in Africa have contributed significantly to access in primary education, there is increasing deterioration of the quality of primary education. This is due to cost and human capacity. Operating a national quality assurance entails an annual budget of at least US$450,000 and requires appropriately trained and experienced staff (World Bank, 2007). This affects the provision of physical facilities, teaching and learning materials, deployment of teachers and performance to the transition of pupils from primary to secondary education. Priorities for World Bank lending for primary education in Sub-Saharan Africa include increasing children’s learning and completion rates, expanding access to schooling and efficient utilization of additional resources for primary education. There seems to be strong evidence of internal inefficiency. Most countries in Sub-Saharan Africa had an average primary completion rate (PCR) of 67 percent by 2009 (World Bank, 2012). The transition rate of students from primary to secondary stood at 33 percent. There is also high rate of repetition at all levels of primary whether public or private. Schools have also enrolled over-age children and teachers use unsound pedagogical approaches. Sub-Saharan Africa (SSA), with about 740 million
people (World Bank, 2007) and a fast increasing number of public and private primary education institutions with high gross enrollment ratio in the world, is now paying greater attention to issues of quality at the primary level. Countries are becoming conscious of the need for effective quality assurance and quality improvement in primary schools.

In Kenya, the government committed to implementation of the international protocols (UPE, UNCRC, EFA, 2000 Dakar framework for action and MDGs) through domestication of the international instruments. The domestication led to legislative development and enactment of Children Act of 2001, sessional paper number 1 of 2005, sessional paper number 14 of 2012 and Basic education Act of 2013. The constitution of Kenya was promulgated in 2010. The constitution recognized education as a basic human right. It provides for quality basic education as a right. Subsequently the government convened national conference on education in 2003. Subsequently Kenya Education Sector Support Programme (KESSP) was constituted to implement the national plan of action. In spite of this, sessional paper number 1 of 2005 on education, training and research had to be enacted by parliament. The sessional paper had to be operationized through KESSP (2005-2010). However with the promulgation of the constitution of Kenya in 2010, there was need to realign the education sector with the constitution. Hence sessional paper number 14 of 2012 on education and training; and the Basic Education Act of 2013 had to be enacted by parliament. These legal instruments emphasized on improvement of quality education.

The government of Kenya has invested in the education sector in order to realize EFA and MDGs. Currently the government has set 6.4 percent of the country’s Gross Domestic Product (GDP) to the education sector (GOK, 2014). This translates to 17 percent of the national budget. The purpose is to realize quality education in primary schools. However, most of the money (52 percent) allocated is spent on recurrent costs especially teachers’ salaries. But whether schools are functioning efficiently or whether pupils are learning in schools is another matter. There appear to inefficiency in allocation and usage of resources. The issue of quality is therefore a concern for researchers and education authorities worldwide. It has drawn attention on policy and practice interventions to achieve the same.

In light of the background, information there is evidence that quality education in primary schools is crucial. It is against this background that this study interrogated the influence of physical facilities on quality education in Kenya.
1.2 Access in Primary Education

The Kenya government had to commit herself to international protocols on expansion of education and promotion of quality education. The instruments signed included 1990 (Jomtien) and 2000 (Dakar) declarations on Education for All (EFA), and Millennium Development Goals (MDGs) to achieve Universal Primary Education (UPE). She had to develop policies on UPE in order to attain global target for EFA. Parliament had to enact Children Act in 2001. Section 7(1) of the Act states that every child has a right to Education, the provision of which shall be the responsibility of the government and parents (Children Act, 2001). The constitution of Kenya under Article 53(1a) recognizes Education as fundamental human right. Kenya began campaign for universal primary education (UPE) after 1963. The independent government abolished the racial system of education and introduced a national system of education in 1965.

In 1974 Kenya introduced FPE from class 1 to class 4. By 1982, the primary enrollment had grown to 4,184,602 pupils. In 2003, Kenya reintroduced FPE. Consequently, there was an increase of pupil enrollment from 6,131,000 in 2002 to 7,208,100 in 2003 (G.O.K 2004:34). The achievement of UPE was realized in 2003 with provision of FPE and subsequent increase in enrolment (Sifuna & Sawamura, 2008). Since the introduction of FPE in Kenya in 2003, there has been an upward trend in enrollment. This is reflected in the table below on enrollment trends of pupils in primary schools from 2009 to 2013.

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment</td>
<td>9381.3</td>
<td>9857.9</td>
<td>9995.2</td>
<td>10182.6</td>
</tr>
</tbody>
</table>


The above survey reveals that there has been great improvement in access in Education since 2003. UNESCO (1995) concurs that in terms of access, Kenyan education system at least at primary level is one of the best on the continent. While FPE has succeeded in increasing quantity of children enrolled in primary schools, there is concern over quality of primary school education being offered. High enrolment has put pressure on existing resources responsible for quality education (GOK, 2004). In light of this, classes are over enrolled. With inadequate physical facilities, instructional materials and teachers, effective learning achievement cannot be realized. Therefore, although FPE has succeeded in increasing quantity of children enrolled in primary schools, there is concern over the quality of primary school education being offered.
1.3 Quality Primary Education

With rise of people’s aspirations, education was declared a fundamental human right by UN General Assembly in 1948. Considering the importance of basic education in economic development and peace development, countries Sub Saharan Africa had to launch programmes to increase access in primary education. This was in response to the globalised framework of Jomtien and 2000 Dakar framework for action and the MDGs on achieving universal primary education (UPE) by 2015. Many Sub-Saharan African governments had to abolish school fees in public primary schools. This led to introduction of FPE in Africa. This was geared towards achievement of EFA. However, some of the African countries had enormous differences in enrolments and participation. Other Sub Saharan countries had to achieve close to universal provision. The rest of sub Saharan Africa countries still lag behind in achievement of universal primary education. This is due to conflicts and weak economies in some of these African countries. This has led to realization of the goal of FPE in some countries of Sub Sahara Africa.

Following the introduction of free primary education, many countries in Africa have experienced an upsurge of primary school enrolments. Despite the increased access to quantity education, quality education which is seen as an important means of achieving development goals has not been realized. The issue of quality education arose during the EFA global conference held in Jomtien, Thailand in 2000 (UNESCO, 2000). Declaration number two of the conference is to ensure that by 2015 all children access free and compulsory primary education of good quality. The 2000 Dakar framework for action reaffirmed quality as a determinant of enrolment, retention and achievement (UNESCO, 2000). It had to expand the definition of quality to include characteristics of learners, processes (competent teachers using active pedagogies), content (curriculum), and systems (good governance and equitable resource allocations). In this view, Page (2008) further states that quality education should incorporate elements of strong leadership and vision, quality instruction, clear standards, assessment and accountability, adequate and equitable resources, family participation, and community involvement. If these elements are not included, then quality will be diluted. In spite of this, many countries have fallen short of achieving the EFA goal of quality education. There is increasing deterioration of the quality of primary education due the provision of physical facilities, teaching and learning materials. Teacher deployment in primary schools is low. There is also evidence of internal inefficiency (GOK2014), due to enrolment of over-age children, high rates of repetition, dropout rates, and use of unprofessional teaching approaches. The Net
Enrolment Rate (NER) rose from 67.8 percent in 2002 to 95.3 percent in 2013. However, the Gross Enrolment Rate (GER) rose from 88.2 percent in 2002 to 119.6 percent in 2013. It is therefore evident that a higher percentage of school age children have not accessed schooling. There was also an increase in transition rate to secondary schools from 66.9 percent in 2009 to 76.6 percent in 2012. In spite of this, the completion rate increased from 57.7 percent in 2000 to 81.8 percent in 2013.

GOK (2004) further notes that with introduction of FPE in 2003, there was increase in enrolment from 5.9 million students in 2002 to 7.2 million students in 2003 but there were inadequate physical facilities. The strained physical facilities have contributed to inefficiency in schools. A study conducted by Kenya National Examinations Council (KNEC), 2010 revealed that there was minimal attainment of literacy and numeracy skills. Acute shortage of physical facilities might have contributed to the minimal attainment. A study conducted by Southern and Eastern Africa Consortium for monitoring quality in 2007 noted that pupils in Kenyan primary schools lacked physical facilities. In spite of this, UWEZO (2011) further notes that many children access primary education but the quality of primary education was wanting. Poor outcomes of learning are driven by pressure from inputs.

Though the government of Kenya acknowledges that learning achievement has been affected by strained physical facilities, much hasn’t been done. The issue of inefficiency has not been seriously addressed by the government. The government has only redressed the issue of quality by coming up with benchmarks for quality education on Basic learning materials, Textbooks, Pupil-teacher ratios, Class size, Supervisory capacity and INSET. Physical space is crucial for ensuring that pupils participate reasonably in learning activities. Therefore, it is desirable for all primary schools to have these facilities. In relation to pupil-teacher ratios and class size, smaller values are preferred for better quality education. It is therefore necessary to have lower values on this indicator is associated with more interaction between teachers and pupils, resulting in better quality education. Hence, the focus is for the study was the availability and maintenance of school physical facilities. These benchmarks form the basis upon which quality education can be realized.

1.4 Role of physical facilities in implementation of quality education

Physical facilities are the structures provided in the school in order to facilitate teaching-learning process. The facilities include school building, availability of enough rooms, proper lighting and ventilation, seating and furniture, provision of pure and safe drinking water, availability of playgrounds, laboratories, writing boards, enough washrooms (Khan, 2012). Shami and Hussain (2005), reveal that availability of physical
facilities in schools have a significance impact on students’ performance. Mackatiani (2017), further notes that pedagogical approaches employed in primary schools are mainly teacher-centered. This may be as a result of inadequate physical facilities. Connected to school facilities, environment in which the students learn is important. Building age highly correlates with student achievement (O’Neill and Oates, 2001). Bruce (2006) concurs with the findings when he notes that learning environment is considered as the third teacher. It is important as it is therefore important to note that space is a crucial factor in influencing learning. The conclusion is therefore that modern environments are crucial for learning achievement. Furthermore, provision of necessary facilities in schools ensures proper environment for the learning process.

A study conducted by GOK and UNESCO (2004) revealed that with introduction of FPE in 2003, there was increase in enrolment from 5.9 million students in 2002 to 7.2 million students in 2003. MOEST (2006) concurred with the findings of GOK and UNESCO (2004). It noted that there were inadequate physical facilities in ASAL and rural areas. Inadequate physical facilities impact negatively on learners’ achievement. KNEC (2010) noted that interventions were needed such as improved facilities for pupils with special needs. Maina (2005) and MoE (2005/2006) noted that parents developed marginal interests in schools, viewing FPE as government project and hardly complemented government efforts in provision of physical facilities.

To ignore physical facilities is therefore a disregard to the physical difficulties of learning. Hence, classrooms and other physical facilities are very important and should match the enrolment of pupils in primary schools.

2. Statement of the problem

From the background information, it is evident that Kenya domesticated international protocols in order to realize EFA and MDGs goals. Kenya had to re-introduce FPE in January 2003. This was to make primary education accessible to all children irrespective of their social classes. The primary education to be offered is to be qualitative. However, sudden influx of pupil population has had far-reaching implications in terms of existing physical facilities and human resources. These implications have challenged the quality of education being offered to all citizens. The Education policy formulated is to promote quality education as expected by citizens and promote these aspirations. Teachers, as policy implementers eventually translate the rules and regulations into actual classroom practice on a day-to-day basis. Nevertheless, this appears elusive as evidenced by low academic performance by learners. This scenario has been due to conservative elements in people’s mental states, which makes it difficult for teachers and other stakeholders to
adapt and face challenges that arise because of quality education. This study, therefore, investigated whether issues of quality education in primary schools in Kenya is a reality or an assumption. The variables investigated included school physical infrastructure, human resource and instructional materials. These variables are considered crucial for pupils to participate reasonably in learning activities in the classrooms.

3. Significance of the study

The study might be significant to the government of Kenya and sub Saharan countries, as the findings would be used by education planners on how to incorporate available inputs into education to achieve quality education in public primary schools. Policy planners would use measures identified in formulation of policy on provision, improvement and efficiency of primary education. Using the findings on quality in public and private primary schools, roadmaps would be designed for continuous improvement of quality education. When educators understand the aspect of continuous improvement, they will gain confidence to shape and alter the nature of their schools.

Findings from this study may also provide suggestions for quality assurance to be shared with people involved in the study and the public at large. The study findings are likely to draw attention of stake holders to focus on the needy areas in respect to implementation of quality education in primary schools. Quality Assurance and Standards Officers (QASOs) may use the information on supervision of schools. The results too, are likely to assist teachers to deal with their weaknesses including redressing them.

Finally, findings of the study may further add to growth of knowledge on quantity and quality education in primary schools. This study may add to the existing research findings and literature on quality education in primary schools. In addition, it might help future researchers while identifying priority area in which to carry out more research. The findings may therefore be of interest to researchers in educational policy studies; and comparative and International education since it provides data on what the Kenyan government is doing in promoting the development of quantitative and qualitative primary education.

4. Theoretical framework

This study used the systems theory. Systems theory was advanced by Ludwig von Bertalanffy (1968). He emphasized that systems are open and interact with their
environments to acquire qualitatively properties. Systems theory focuses on the arrangement of relations between the parts which connect them into a whole. It further provides an analysis of an organization. It recognized the influence of personnel in an environment on organizational structure and function. It focuses on environment and how changes can impact on the organizations. It also explains the interdependence that is reflected in the organizational behavior. Systems theory is therefore an Input Process Output model. This study therefore used this theory as schools are organizations with various parts that are open and interact in order to acquire qualitative properties. A qualitative property to be acquired is implementation of quality education in primary schools. This is the process in this model. Inputs of class size and physical facilities lead to implementation of quality education in primary schools. These are the independent variables of this study. The output which culminates into outcomes of quality education is realized in quality indicators. These indicators include literacy skill numeracy skills, life skills values and attitudes.

5.1 Research methodology
The study targeted head teachers and teachers in primary schools teachers in Kakamega County. Kakamega County was targeted because it is second largest county in Kenya. It has got 12 sub counties. It is also cosmopolitan and characteristics found in Kakamega County cut across the country. It was, therefore, possible for the findings to be therefore generalized. Thus, the findings of the study represented a national image. Kakamega County has got 700 public primary schools and 100 private primary schools. Using the sampling guide developed by Krejcie and Morgan (1970), a sample size of 24 public primary schools (two per Sub County) and 12 private primary schools (one per Sub County) was selected. 36 head teachers (one head teacher per school) were therefore sampled. 4 teachers per school were randomly selected from the 36 sampled primary schools. The sample size for teachers was therefore 144. The total sample size was 180. This was to conform to the confidence Interval of 0.05, confidence level of 95 percent which is a Z-score of 1.96 and standard of deviation of 0.5.

The study objectives led to the collection of partly quantitative and qualitative data. In this case, quantitative data, attitudes, and opinions of respondents were analyzed and generalized in order to derive descriptive statistics. This led to the coding of collected data. The coded data had to be entered in the computer and the statistical package for social sciences software (SPSS version 19) was used to analyze the data. Qualitative data was classified according to variables of the study such as recommended availability of physical facilities and their maintenance. The Cronbach’s alpha test of variable reliability from SPSS was used to determine the relevance.
coefficient at 0.812 on all standardized items (SPSS, 2010). Descriptive statistics gathered included means, frequencies, standard deviations, and regressions. Findings were depicted using tables and graphs. Regression analysis was used to determine the relationship between independent variables of physical facilities and the dependent variable of quality education.

5.2 Research instruments
The research study used two sets of questionnaires and observation schedule to collect data. The two sets of questionnaires were administered to head teachers and teachers. The questionnaire had open and close ended items. The close ended items contained Likert scale methods of summed ratings-a statement is made and the respondents indicated their degrees of agreement and disagreement in relation influence of physical facilities on quality education. Observation schedule was used survey the existing physical features of school buildings, classrooms, office, desks, libraries, play grounds and toilets.

5.3 Data analysis
The study used one set of questionnaires that were distributed to 36 primary school head teachers and 144 teachers. The data obtained from the head teachers and teachers was supplemented by observation schedule. The data was edited, coded and entered in computer using statistical package for social science (SPSS) software. The data was quantitatively and qualitatively analyzed. Cranach's Alpha Coefficient of .812 was used to determine the reliability of the study. Descriptive statistics such as percentage, frequency, graphs were used for quantitative Data narration was used for qualitative data. Conclusion drawn was based on the findings of the study.

6. Results and discussion
The purpose of this study was to determine the effect of physical facilities on quality education in primary schools. Primary data was collected from 36 head teachers and 144 teachers from primary schools in Kakamega County. Bivariate analysis of one-way ANOVA was conducted. F statistic and cross-tabulations with $\chi^2$ statistic were generated. Multivariate analysis obtained $\beta$ coefficients. The study therefore sought information on availability and maintenance of physical facilities in primary schools by rating the facility as Adequate (Ad) and Inadequate (Ia). The findings are presented in tables 6.1 below:
From the table above, 72 percent of primary schools had adequate administration facility. 28 percent of primary schools had inadequate administration facility. It was further revealed that 33 percent of primary schools had adequate classrooms. 67 percent of primary schools had inadequate classrooms. It was also revealed that 16 percent of primary schools had adequate latrines while 84 percent of the primary schools had inadequate latrines. 33 percent of primary schools had adequate desks, while 67 percent of public primary schools had inadequate desks. It was also revealed that 33 percent of the schools had adequate tables and chairs while 67 percent had inadequate tables and chairs.

The study also sought to find out the extent to which school physical facilities are maintained. School building components have measurable influence upon student learning. Various studies have revealed that buildings with deficiencies impact negatively on learners’ achievement (O’Neill, 2000; Chan, 1996). If buildings are well maintained, then the influence reverses to positive. In order to assess maintenance of physical infrastructure in public and private primary schools in Kakamega County, head teachers and teachers were asked questions on the maintenance of administration block, classrooms, latrines and desks. The head teachers’ and teachers’ views on this variable was expected to provide information on the contribution of school physical facilities to implementation of quality education in public and private primary schools. Their responses were collaborated with the information the researcher solicited from the observation schedule. The analysis of head teachers’ responses and information gathered from observation schedule by the researcher are contained in table 6.2.
From table 6.2 above, it is revealed that 50 percent of primary schools had well maintained administration block while 27 percent maintained classrooms. 17 percent of primary schools had maintained latrines and 17 percent of primary schools had well maintained desks. The responses indicate that most schools poorly maintained School physical facilities.

6.1 Testing hypothesis of the study

The study hypothesis was $H_0$: School physical facilities do not significantly influence quality education in primary schools. In order to determine influence of examinations oriented approaches on quality education in primary schools regression analysis was done. Results of the analysis were as indicated in table 6.3 below:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>.189</td>
<td>.036</td>
<td>-.045</td>
<td>.479</td>
<td>.036</td>
<td>.442</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), administration block, latrines, classrooms, water and electricity, tables, desks, chairs, library
b. Dependent Variable: Quality education

The results from the table above revealed that there was no significant relationship between the influence of physical facilities and implementation of quality education in primary schools. This was supported by the Durbin-Watson statistical test. The Durbin Watson statistical test value is reported from the value from 0 to 4. Hence, the value 2 doesn’t have autocorrelation. While 0 to <2 depicts positive autocorrelation. A value that is between 2 to 4 is negative autocorrelation. The DW of $H_0$: $p > 0$. P was 1.193. This indicates positive autocorrelation. The null hypothesis is therefore accepted. However, the DW is closer to values between 2 and 4. This implies that physical facilities alone do not significantly predict quality education. A combined force with other factors would significantly influence implementation of quality education in primary schools. The variables in the study subsequently predicted quality education in primary schools. The analysis of variance (ANOVA) was also done and is represented in the table 6.4 below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.102</td>
<td>1</td>
<td>.102</td>
<td>.442</td>
<td>.519</td>
</tr>
<tr>
<td>Residual</td>
<td>2.756</td>
<td>12</td>
<td>.230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.857</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From table 6.4 above, F value is .442 with a Sig. (p) value of .519. Since the Sig. value .519 is greater than our alpha of .05, p > .05. It is not significant at p< .05. The null hypothesis is therefore accepted. This indicates that there is no significant difference between the variances of physical facilities. All variables combined therefore predicted the quality of education in primary schools.

7. Conclusions

- From the study it can be concluded that UPE and EFA policies have contributed to quantitative primary education. However, there is increasing deterioration of quality primary education due to pressure on strained physical facilities.
- The study revealed that the annual budgetary allocation for the education sector stands at 17 percent. The allocation is inadequate for implementation of quality education in primary schools.
- The Free Primary Education policy and benchmarks for quality education have set by the government of Kenya. However, these policies are not being implemented to realise quality of education in primary schools.
- From the study findings, it can be concluded that primary schools had inadequate all the physical facilities required for actualization of quality education in primary schools.
- From the study findings, it revealed that physical facilities in primary schools were poorly maintained. It was therefore concluded that pupils learn in poor environment conditions.
- The study concluded that availability and maintenance of physical facilities influence implementation of quality education.

8. Recommendations

- The government of Kenya has allocated 17 percent of her national budget to education. However, 52 percent of the money allocated is spent on teachers’ salaries. It is therefore recommended that at least 25 percent of the national budget be allocated to the education sector if the developmental goal of quality is to be realized.
- This study has established that there is legislation to embrace free and qualitative primary education. The FPE policy is in place and benchmarks for quality education have set by the government. However, implementation of education
policy to ensure quality is crucial. It is therefore recommended that proper structures to be put in place to enable achievement of quality primary education.

- The study established that the government of Kenya has set a benchmark of the ratio of pupils to classes as 45:1. However, there is acute shortage of physical facilities which has led to negative impact of quality primary education. It is therefore recommended that the government should actualize her obligation on improvement of physical infrastructure in primary schools.

- UPE and EFA policies have contributed significantly to quantitative primary education. However, there is increasing deterioration of quality primary education ranging from the provision of physical facilities, teaching and learning materials to deployment of teachers. It is therefore recommended that a proper policy be put in place to address these measures in order to improve the quality of primary education.

- From the study there is evidence of internal inefficiency reflected enrolment of over-age children vis-à-vis provision of physical facilities. The issue of inefficiency has not been seriously addressed by the government. It is therefore recommended that the government should come up with clear policy to redress inefficiency in primary schools.

References
