Adequacy of School Resources and infrastructure in relation to Pupils’ Performance in English subject at Kenya Certificate of Primary Education Examination

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Abstract: School resources and infrastructure are very essential to the learning and teaching process. In exploring level of learner performance in Kenya Certificate of Primary Examinations, learning resources and school infrastructure is one of major indicators of the level of preparedness for enhancing learner performance. The study determined the relation of the adequacy of school resources and infrastructure on learner performance in Kenya Certificate of Primary Examination (KCPE) in English subject in public primary schools in Kenya. The study used descriptive survey design using purposive sampling technique. This enabled the study capture how levels of adequacy of school resources and infrastructure relate to learner performance in National Examination public primary schools in Machakos County. The unit of analysis was Public primary schools. The County has 842 Government run public primary schools out of which 86 schools were studied. Data was collected using observation schedules and questionnaires. Respondents were teachers who teach English subject. Study found that availability and usage of teaching and learning resources averaging 65% and availability/adequacy and usage of school infrastructure averaging 60% to correspond to learner performance scores in KCPE.

Key word; learning resources, school infrastructure, Kenya Certificate of Primary Examination, pupils' performance

I. INTRODUCTION

Background to the study

The United Nations General Assembly Resolution 70/1, the 2030 Agenda endorsed, among others, Quality Education as one of its global sustainable development goals. This goal seeks to ensure that there is inclusive and equitable quality education that promotes lifelong learning opportunities for all. One of the targeted areas of this goal is the need for adequate physical infrastructure and an environment that nurture learning for all (The Sustainable Development Goals Report 2017, UN). In its 2017 Report on Quality Education, UNDP urges countries to ensure inclusive and equitable quality education and promote long learning opportunities for all. UNESCO (2010) Report says that out of 61 million young learners in the world who do not pass basic examinations, 41% live in sub Saharan Africa. The Report adds to say that unless appropriate actions are taken many young learners will end up being like their adult illiterates estimated to be about 875 million people around the world. In realization for the need of a knowledgeable and skilled population to drive its Vision 2030 Agenda of being an industrializing middle-income economy, Kenya embraced the resolution of the United Nations and UNDP on Quality Education calling for provision of quality education that is accessible to all children in all public schools offering basic education in all member countries (MOE 2017 Report).

A World Bank Report says that Learning resources influence not only learner performance but also teacher motivation and educational outcome. The Report adds that learning institutions which do not have adequate resources post low performance among learners (World Bank, 2001). The OECD Report shows material shortage hinders teaching and lowers learner performance (OECD, 2007). Johan (2004) says that good examination performance in schools is directly related to adequacy and usage of learning resources; and concludes by saying that schools that don’t have sufficient resources are likely to post poor performance in most subjects.

UNESCO (2000) Report says that provision of appropriate and relevant learning and reading materials is one sure way of improving results in institutions of learning such as schools. The report further calls for proper use of available teaching and learning resources. Such resources critical in language performance, the report points out, include libraries, audio and visual material. Charles and Coombs (2010) say audio-visual materials are useful tools in the learning process particularly with physically challenged learners. Chang (2009) and Slavin (2010) found adequacy of learning resources to be proportionally related to learner performance. Glewwe et al., (2010) found that teachers in remote schools in Kenya to use non textbook teaching materials lasting approximately 20% of the lesson time in class. Levacic and Vignoles (2005) report found a direct association between school resources and student grade score; and calls for proper use of school resources in order to improve student performance in National assessments.

Quadri, Ogunjide and Oladejo (2003) say investment in school resources and infrastructure improves learner performance in Nigeria. Charles and Coombs (2010) say Audio-visual materials are an integral part of teaching and learning process and bring out permanent first-hand
experience among learners. Nyamubi (2003) says learning resources make learning to become pleasant and lively in class; and enables learners an experience that stimulates imagination, creativeness and self-activity thus eliciting their conceptual thinking. American Association of Colleges for Teacher Education (AACTE, 2001) reports that learner performance is greatly influenced by proper utilization of learning resources by teachers. Chang (2009) says usage of instructional resources improves explored facts which become fixed firmly in the memory of student learners.

The Kenya Government provides free basic education and free textbooks to all students in public schools at all levels in order to actualize Quality Education for all her school going children. In addition, the Government both at National and at Devolved units has embarked on development of school infrastructure and supplying same with requisite school resources to improve on the quality of education. This Government effort was lauded in Department of International Development Report of 2007 that does confirm that learner achievement being realized is as a result of improved learning resources (DFID, 2007). Douglah et al., (2003) found that no amount of professional training and planning would make a difference in the performance of learners if learning institutions lack learning resources.

Kenya Public Expenditure Review published by Ministry of Education (MOE, 2015) shows an approximate sum of KES 116 Billion was spent on Education during the 2014/2015 fiscal year. Out of this budgetary allocation, 50 % amounting to KES 83 Billion went Primary Education. This investment purposed to improve the quality of Education has not translated into learner performance as reflected in average Mean score in KCPE in English subject over the past five successive years (2012 – 2016) under study. Kenya National Examinations Council (KNEC), a statutory body which sets and examines National Examination shows that Candidates continued to post average to below average Mean scores in English subject. This average to below average performance nationally is mirrored in the performance of primary schools in Machakos County. Education for all Report (2005) shows that effective learning in schools is influenced largely by adequacy of school resources and infrastructure. This study sought therefore to investigate influence of adequacy of school resources and infrastructure on pupils’ performance which is used a benchmark measure of quality education.

Despite impressive enrollment rates and heavy investments, level of supply of resources and learner performance in English subject in public primary schools are still below par level of supply of resources and learner performance in English subject. This average to below average Mean scores in KCPE in English subject over the past five years (2012 – 2016). For example, in 2016, KCPE examination means score grade in English language was 50.52 % with English composition averaging a grade score of 40.25 % against a grade score of 49 % and 41.38 % in 2015 KCPE in English. This trend is worrying since English is an International language that facilitates communication in the teaching of other subjects.

The KNEC (2017) report says some candidates used indigenous languages or mother tongue in answering the questions. The report further reminds concerned parties such as teachers and KNEC examination candidates sitting KCPE English subject that learning resources are critical in ensuring performance of learners. The report concludes by saying that KCPE examination mean score grade in English Composition and English Language has been on average consistently below 50 % over the last 5 years (2012 – 2016). For example, in 2016, KCPE examination means score grade in English language was 50.52 % with English composition averaging a grade score of 40.25 % against a grade score of 49 % and 41.38 % in 2015 KCPE in English. This trend is worrying since English is an International language that facilitates communication in the teaching of other subjects.

Statement of the problem

KNEC (2017) Examination audit report on performance of KCPE candidates between 2014 and 2016 and MOE (2016) on KCPE Examination results decry the candidates’ poor grade scores in successive National examinations particularly for English subject. The twin reports attribute candidates’ poor grade scores in English language to their use of backstreet language called Sheng both in their day-to-day communication and as a written language. The inadequate provision of learning resources and school infrastructure in public primary schools in Kenya is also a concern as far as learner performance in National examinations is concerned. The KNEC (2017) report says some candidates used indigenous languages or mother tongue in answering the questions. The report further reminds concerned parties such as teachers and KNEC examination candidates sitting KCPE English subject that learning resources are critical in ensuring performance of learners. The report concludes by saying that KCPE examination mean score grade in English Composition and English Language has been on average consistently below 50 % over the last 5 years (2012 – 2016). For example, in 2016, KCPE examination means score grade in English language was 50.52 % with English composition averaging a grade score of 40.25 % against a grade score of 49 % and 41.38 % in 2015 KCPE in English. This trend is worrying since English is an International language that facilitates communication in the teaching of other subjects.

The KNEC (2017) 2016 KCPE Examination Report says that some candidates sat for the examination in worrying environments with major disruptions, for instance in open air and inaccessible areas. This raises the issue of the level of adequacy of resources and the influence it has on learner performance. MOE (2017) report on KCPE Examination says some candidates examined for the Kenya Certificate of Primary Examination did not follow instructions, misunderstood or misinterpreted the questions, and demonstrated lack of adequate English skills when answering examination questions. Consequently, KCPE performance particularly in English subject has on average fared poorly over the last five years (2012 – 2016) as indicated below. Could provision of adequate learning resources be a contributing factor on the learners performance in National Examination in English Subject?

<table>
<thead>
<tr>
<th>Year</th>
<th>Machakos County Mean Score</th>
<th>National Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>46.13</td>
<td>45.08</td>
</tr>
<tr>
<td>2013</td>
<td>47.78</td>
<td>44.82</td>
</tr>
<tr>
<td>2014</td>
<td>47.61</td>
<td>46.22</td>
</tr>
<tr>
<td>2015</td>
<td>46.53</td>
<td>46.02</td>
</tr>
<tr>
<td>2016</td>
<td>41.66</td>
<td>41.22</td>
</tr>
</tbody>
</table>

Table 1.2 shows that Kenya Certificate of Primary Examination Mean score in English subject in Machakos County and Kenya National performance has been closely similar the years. The demographic characteristics of Machakos County mirrors the Nations demographics geographically and socially. Overall, KCPE (2012-2016) Examination mean score in English subject (2012 – 2016) was 44.671 %. This performance of candidates in KCPE Exam in English subject at National level was analyzed and compared with trend in KCPE examination score in English subject in Machakos County. The performance trend in KCPE examination score (2012 – 2016) is graphically shown overleaf. Performance trend for both National and Machakos County dipped in 2015 to the lowest level in Kenya’s recent education history (41.215%).

Purpose of the study

The purpose of the study was to investigate relation of the adequacy of school resources and school infrastructure on pupils’ performance in Kenya Primary Examination English Subject in Public primary schools in Kenya.

Objective of Study

The objective of study was to assess relation of adequacy of school resources and infrastructure on pupils’ performance at KCPE in English subject in Kenya.

II. EMPIRICAL EVIDENCE

Adequacy of resource materials in schools is necessary if teachers are to be effective in their teaching. The converse also holds for learners who ably learn effectively if resource materials and supporting infrastructure are available in school. Even more important in both teaching and learning is appropriate use of those available resource materials which determines the extent and depth of students’ readiness to learn and perform in National Examinations. Teaching and subsequent learning activities are founded in among others provision of adequate resources. In a nutshell, a school whose teachers and students do not have adequate resource materials hampers not only the delivery of curriculum but also learners interest in the learning process.

According to Kapoli (2001) realistic and original materials assist students explore and internalize what they learn as well as practice day-to-day language that is tailored to their needs and interest. UNESCO (2000) report says when the teaching and learning materials are provided adequately becomes one way of ensuring improved results. The report continued to say that availability, adequacy proper usage and high standard of school resources is key to ensuring that learning is interesting and achievement of learners in English subject is improved; and that libraries, audio and visual materials are critical in language performance. The report concluded by emphasizing role of learning resources enhancing learner skills and acquisition of relevant competencies.

From the study of Charles and Coombs (2010) audio-visual materials are a major part of learning resources and assist to contribute lasting and significant impact. Chang (2009), Slavin (2010) and Nyamubi (2003) say achievement of learners in examinations in schools is directly related to adequacy and relevancy of learning resources. Glewwe et al., (2010) showed that tutors in remote arid Kenyan schools used 20% of the time in class using other learning resources to improve on learner performance. Lastly, the study points out overcrowded classrooms, inadequacy of school resources and unworthy infrastructure as major obstacles to having friendly learning environments that may hinder learner performance in National Examinations. There seems to be a likelihood of a nexus between adequacy and availability of school resources/infrastructure and performance of learners in National assessments or examinations. Various variables have been found to influence Learner performance.

Levacic and Vignoles (2005) report found a relationship to exist which links school resources directly to performance of students’ in secondary schools in the United Kingdom thereby making conclusion that school resources directly relates to National students’ assessments grade scores. Report recommended additional resources to ensure adequacy and proper usage of the same in order to improve performance of students in National assessments (examinations). Farrant (1988) found in a study that when teachers lack of adequate teaching resource materials, they resort to traditional teaching practices yielding poor performance in their areas of specialization.

Quadri, Ogunjide and Oladejo (2003) in quoting from Nigeria’s National policy on Education say the realization and actualization of the 6–3–3– 4 Education System in Nigeria wholly depends on the use of instructional technology. This is the most relevant learning resource in 21st Century Education. From this study it is evident that the integration of technology resources is far from being realised in most public schools in Kenya. That investment in learning resources and school infrastructure will realize improved learner performance. Charles and Coombs (2010) in a study on audio-visual aids in schools say that Audio-visual materials are integral part of teaching-learning situations and help to bring about permanent and meaningful experience. They further argue that Audio-visual materials provide first-hand experience where possible and vicarious where feasible. The study emphasizes that learner performance is improved when incorporation of learning resources is considered and availed.

Nyamubi (2003) says that learning materials are very significant in the teaching and learning process of all subjects. There is no doubt that the resources liven and make real classroom experience. They offer students a reality of experience which provokes their mental faculty and stimulates self-activity, creativity and supply a concrete basis for critical thinking and problem solving.
According to Wachiye (1990) adequate and relevant learning resources involve multiple use of human senses during the learning process. He adds that research by psychologists have shown that the diverse human senses amount to varying learning percentages: Tastes 1%, touch 1.5%, smell 3.5%, hearing 11%, sight 83%", and that 20% of what is heard is retained and 50% of what is seen is retained thus the need for teaching aids and other resources. The study is categorical that without adequate learning resources and learner use of several senses then learner performance in Examinations would continue to have a challenge. This is in line to the findings of this study that showed that an improvement in adequacy of the resources resulted in improvement performance of learners in National examinations. American Association of Colleges for Teacher Education (AACTE, 2001) says in its published report that learner performance is greatly influenced by having adequate and relevant learning resources and proper utilization of the same by teachers and that improvement on learners' performance is directly related to teachers' utilization of diverse learning resources in their classroom interaction. Chang (2009) in a study on learning resources and student achievement shows that the usage of adequate and relevant instructional resources improve the discovered facts glued firmly to the memory of students. Slavin (2010) says in a study that a well-planned, systematic, orderly and imaginative use of visual aids in lessons should do much to banish apathy, supplement performance

Nyanumi (2003) argues that learning resources improve progression of skills through practice. Learner performance is based on use of appropriate learning resources that makes learning realistic and reinforces teaching process for acquisition of skills in classroom. Teaching and learning materials include recommended text books, student books, maps, chalkboard, chalk among other teaching materials. Gannicott and Throsby (1996) found overwhelming evidence connecting use of text books in learner performance as well as other instructional materials in schools to learning.

In Kenya, the Government has ensured the provision of text books to public schools at all levels since FPE funds in 2003. This is to improve quality of learning process and learner performance. The ratio of text books in most schools is at the 1:3 for all the subjects while other schools it is 1:2. This enhances learner performance and improves on quality. Maicibi (2003) argues that human resources as well as appropriate allocation of relevant learning resources make learning exciting. Research findings from Department of International Development (DFID, 2007) confirm learner's achievement is consistently improved when learning resources are adequate and available. Computers and internet are a rich source of e-materials. Unfortunately, many developing countries find e-based learning a very expensive venture to introduce and service in public schools. This study reveals that e based learning materials are minimally used in public primary schools in Kenya.

World bank(2001) report shows that learning resources in learning institutions influence not only learner performance but also teacher motivation and educational outcome. The report shows material shortage hinders teaching and lowers learner performance. Johan (2004) argues that good examination performance in schools is directly related to adequacy and usage of relevant learning resources. He adds to say in conclusion that schools which do not have enough resources are likely to post poor performance in most subjects. Learning institutions that have inadequate resources show low performance among the learners.

According toDouglar et al., (2003), when learning institutions lack learning resources, no amount of professional training and planning would make a difference in the performance of learners. Therefore, learning institutions have to ensure and improve on provision of learning resources to improve on performance of learners in all subjects moreso the English subject. From existing literature, Africa allocation of learning resources is limited because of financial constraints. There is evidence that considerable financial resources are put in other development projects at the expense of Education. The utilization of learning resources opens opportunities for learning and interaction of learners with real world. Provision of adequate learning resources is learning institutions is investment in achievement of Sustainable Development Goals, reduction of illiteracy in arid areas as well as reduction of poverty in the marginalised area of Africa.

This study shows that use of audio visual and computers most public schools is minimal with audio visual use at 11 per cent and computer at 2.3 per cent. This is an indication that technology has not been embraced as a booster to learner performance and therefore 21st Century skills in learning and teaching is still a challenge. The chalkboard is the most widely used resource at 47.6 per cent showing that teachers are traditional in the teaching process which has an influence to learner performance.

**Conceptual framework**

In the framework, adequacy of school resources and infrastructure is the Independent Variable of the study. Particular variables of the Independent Variable (IV) assessed for their adequacy are: classroom space, staffroom space, playing field, sanitation blocks, drinking water, reference resources, chalkboard, exercise books, text books, school library, audio-visual and electricity. Learner performance
assessed as Mean Scores in KCPE examinations in English subject was the Dependent Variable (DV) of the study.

III. METHODOLOGY

The study used descriptive survey design method recommended Best nd Kahn (2006) for use in assessing educational program. In recommending the design, Best and Kahn (2006) indicate that descriptive survey is an appropriate design for assessing Educational matters for it uses both qualitative and quantitative information to identify, analyze and interpret conditions that exist in relation to set standards. The strength of the design is its ability to study, describe, explore and analyze relationships. This study found this design to be quite appropriate because it sought to explore and analyze relationships between availability and use of learning resources and learner performance. Questionnaires were structured and entries on adequacy of school resources and infrastructure scored on the following scale rating: Very adequate (75 – 100 %); Adequate (60 – 74 %); Fairly adequate (40 – 59 %); Inadequate (below 40 %).

Observation schedule was also employed by the principal researcher to collect secondary in addition to primary data collected using questionnaires. The study targeted 842 Government run public primary schools in Machakos County which have a student population of 40,250 pupils in pre-exam Class (Standard seven) and with a classroom teacher population of 1,689 who teach English Language as a subject.

IV. FINDINGS

<table>
<thead>
<tr>
<th>School resources/infrastructure</th>
<th>Machakos Town</th>
<th>Athi River</th>
<th>Kangundo</th>
<th>Kathiani</th>
<th>Mwala</th>
<th>Masinga</th>
<th>Matungulu</th>
<th>Yatta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom space</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
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<tr>
<td>Staffroom space</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
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<tr>
<td>Learner text books</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
</tr>
<tr>
<td>Exercise books/stationery</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
</tr>
<tr>
<td>Chalkboard/chalk</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
</tr>
<tr>
<td>School library</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
</tr>
<tr>
<td>Reference resources/ICT</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
</tr>
<tr>
<td>Audio-visual aids</td>
<td>Fairly adequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
<td>Inadequate</td>
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<tr>
<td>Playing field</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Very adequate</td>
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<tr>
<td>Sanitation blocks</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
</tr>
<tr>
<td>Drinking water</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Inadequate</td>
<td>Fairly adequate</td>
<td>Inadequate</td>
</tr>
<tr>
<td>Electricity supply</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
<td>Adequate</td>
</tr>
<tr>
<td>Rating Mean Scores</td>
<td>Very adequate</td>
<td>Very adequate</td>
<td>Fairly adequate</td>
<td>Adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
<td>Fairly adequate</td>
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</tbody>
</table>

The findings in Table 1 shows that public primary schools in Machakos Town Sub County and in Athi River Sub County are on average very adequately equipped with requisite school resources and infrastructure with Mean score rating on scale of 75 – 100 %. Athi River Sub County borders Nairobi City County and Machakos Town Sub County thus giving it a demographic urbane face. Public primary schools in Kathiani Sub County which borders Machakos Town Sub County and Masinga (a rural constituency) is on average adequately equipped with requisite school resources and infrastructure posting a Mean score rating on scale of 60 – 74 %. Public primary schools in rest of five Sub Counties viz. Kangundo, Mwala, Masinga, Matungulu and Yatta posted average Mean score rating on scale of 40 – 59 % herein described as fairly adequate.

<table>
<thead>
<tr>
<th>Name of Sub County</th>
<th>Adequacy of school resources and infrastructure</th>
<th>Adequacy ratings in percentage (%)</th>
<th>Mean Score performance in KCPE in English subject, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degree of Adequacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athi River</td>
<td>Very adequate</td>
<td>75 – 100</td>
<td>49.85</td>
</tr>
<tr>
<td>Matungulu</td>
<td>Fairly adequate</td>
<td>40 – 59</td>
<td>34.2</td>
</tr>
<tr>
<td>Machakos Town</td>
<td>Very adequate</td>
<td>75 – 100</td>
<td>52.4</td>
</tr>
</tbody>
</table>
Evident in study is existence of direct relationship between adequacy of school resources and infrastructure and learner performance in Kenya Certificate of Primary Education examination result in 2016. Machakos Town whose school resources and infrastructure was assessed and found to be very adequate posted a Mean score performance of The average KCPE score in the two high sub counties public primary schools is 56.1 and 57.3 respectively. The other sub counties i.e Mwala, Kangundo, Masinga, Kathiani and Matungulu sub counties have posted KCPE English scores of below 50% mark. Where the degree of adequacy is between 40-59% the learner performance is below the average mean score of 50%. This indeed shows that as the school resources and infrastructure improves the learner performance is better.

The study found that the most 21st Century learning resources are inadequate in most of the schools. These include but not limited to computers, school library services, staffroom space and audio visual aids. There is need to improve on these resources due to the technological times and the 21st learner interest. The traditional school resources i.e blackboards, chalks, exercise book are the most adequate resources. It is the finding of this study that inadequacy in digital resources and e facilities is a major concern during this digital era.

The foregoing findings underscore the important role which adequacy of school resources/infrastructure plays in teaching and learning process particularly in public primary schools in Machakos County, a County that mirrors public primary schools in Kenya. UNESCO- That deliberate improvement of the school resources and infrastructure has influence on learner performance in English subject.

V. CONCLUSION

The study found that adequacy of school resources/infrastructure averaged 65% while adequacy and usage of school infrastructure averaged at 60%. Of much concern was the low adequacy of Audio-visual aid at 10%, school library services at 25%, staffroom space at 30% and drinking water at 40%. From the finding on staffroom space, the study was able to understand why performance of KCPE in English subject in schools has been poor over past successive years. It is noteworthy from this finding on staffroom space that preparation and safe custody of professional documents such as Progress Records which were available and used at 66% is an indication that without a good supporting school infrastructure, the teaching and learning process is dysfunctional.

The study found that adequacy of school resources/school infrastructure enhances pupils’ performance in National Examinations. This study thus found that inadequate reference materials, nonuse of technology, audio visual aids and limited staffroom space negatively impact on learners’ performance; and that both teachers and learners were unable to adequately improve on their knowledge skills and competencies in English Language as a subject. This finding helps to explain why learners’ performance in KCPE in English subject in Machakos County continues to be poor notwithstanding heavy investments in the provision of school textbooks and in development of infrastructure.

VI. RECOMMENDATIONS

Management teams in schools (BOM and PTA) should proactively work with National Government and other stakeholders in the Education sector to ensure requisite reference materials and technology including audio visual aids is adequately available and used in teaching and learning in schools. This study therefore recommends that the National Government working in partnership with other actors in the Education sector makes available 21st Century learning materials for the 21st century learner to improve their performance in National Examinations.

REFERENCES


