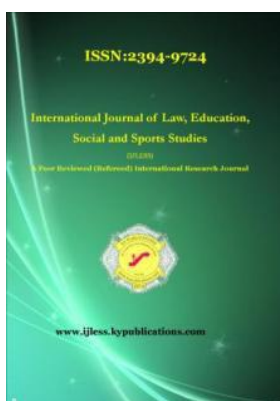




EFFICIENCY IN THE USE OF INSTRUCTIONAL RESOURCES THROUGH FREE PRIMARY EDUCATION IN PUBLIC PRIMARY SCHOOL IN KENYA

ESTHER OMBAJO, JUDAH NDIKU

Masinde Muliro University of Science and Technology
P.O. Box 190, 50100
Kakamega



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ABSTRACT

Efficiency in the use of instructional resources through Free Primary Education in public primary schools is a matter of concern in Kenya. Public primary schools face a number of challenges in relation to performance as compared to their private counterparts, in spite the introduction of FPE in 2003. The study sought to establish the efficiency in the use of instructional resources through Free Primary Education in Public Primary Schools. The objectives were to; establish the relationship between frequency of usage of teaching and learning materials and its efficiency through FPE, determine the frequency of usage of other selected teaching and learning materials, to determine the extent of use of radio, maps and chalkboards. The study adopted a descriptive research design. The target population comprised of all the pupils population 653,000 in Busia County. The sample included ten schools for the pilot study, leaving 36 public primary schools for the final research study. The sample size was drawn from a 30% of the remaining 36 public primary schools. A Proportionate allocation of 30% was obtained from the respondents from each administrative unit in Busia County. Stratified and simple random sampling techniques were adopted in the sampling. Questionnaires and interview schedules were used to collect data. Validation and reliability tests of the questionnaires through the split half was carried. A blend of both descriptive statistics of the percentages and means were also applied. The findings were presented by cross tabulations, charts and graphs. It was established that in most public primary schools, textbooks are the most regularly used teaching and learning materials. This study indicated that most of the textbooks provided to pupils through Free Primary Education are used regularly. This study shows that most of the FPEs' learning and teaching materials provided to pupils through Free Primary Education were being used regularly and efficiently. The study recommended that there is need for teachers to be creative and resourceful in the use of instructional resources. Similarly, materials that may not be provided for by the FPE Programme and also are very costly to purchase were recommended to be improvised.

Key words: Instructional Resources, Efficiency, Learning, Teaching

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INTRODUCTION

Instructional resources which are educational inputs are very vital in all learning institutions as they play a key role in the process of teaching and learning. According to Fans and Moldstad (1963) a modern education programme is impossible without appropriate materials. Use of text books for example is unavoidable if effective teaching and learning has to take place. Research findings by scholars like Eshiwani (1988), Kilundo (2002) and Marugu (2008), show that instructional resources have significant effect on academic performance. They are in agreement with the Ministry of Education (May 2003) which maintains that, international research study over the past 30 years have demonstrated repeatedly that the availability of adequate supplies of textbooks, teachers guides and supplementary reading books have a major impact on pupils' performance; if used properly by teacher in the classroom, they improve pupil achievement. Other research findings in Kenya have shown the important role played by teaching/learning materials in the teaching and learning process. They enhance efficient learning, sustain pupils' attention and remove monotony of speech Ng'ang'a (2008) and Mesis (2006). These research findings have not documented efficiency in the use of instructional resources and particularly in Public Primary Schools and this raises concern on the use of instructional resources despite the heavy investment on them. This paper focuses on the efficiency in the use of instructional resources in public primary schools. Instructional resources which are educational inputs are of importance to the teaching-learning process. They help reduce abstraction and make discovered facts glued firmly to the memory of pupils. However, there is an outcry in the adequacy and use of these resources in primary schools. This paper also examines the efficiency in the use of instructional resources in public primary schools in Kenya. The findings are significance to the Ministry of Education policy-makers, headteachers, teachers, educational planners and other stakeholders in the education sector.

Statements of the Problem

Busia County dropped from number five in 2011 KCPE county ranking to position number seven with a mean score of 276 and positing 26 in 2013. This drop was a clear show of a decline in academic performance among the primary schools in the County. Ogola (2010), noted that this may have been as a result of the material poverty of primary schools in Busia County, that is, few classrooms for younger pupils do not have desks and hence, children often sit on the dirty floor; pupil textbooks are rare, and chalk is in short supply; classes are held outside under a tree for lack of permanent classroom structures.

Supporting National Action Plan (SNAP, 2012) report observed that despite Kenya's commitment towards education attainment for all, disparity and inequality in education and in all other sectors still persists. However, according to the (Presidential Press Statement, 2004), the government remains committed to the support of FPE through the provision of teaching and learning materials, teachers, maintenance and Quality Assurance services pursuant to the Economic Recovery and Wealth Creation Strategy. Nevertheless, Busia County is one geographical region affected by the disparity in education as compared to other counties in the country. Some of the factors that cause the low education attainment in Busia County are; low resource allocation, cultural beliefs and practices, poor management in schools and lack of teaching and learning materials among other. Additionally, FPE has also exacerbated the problem of teaching and learning facilities in terms of the high influx of new pupils which was not in tandem with the available physical facilities hence, low academic performance among primary school pupils. As a result, the effect of supplied teaching and learning materials through FPE on academic performance among public primary schools is in question. In light of this this study sought to determine the effects of the provision of teaching and learning materials through FPE on academic performance among public primary schools in Busia County Kenya.

Objectives

The objectives of the study were

To establish the relationship between frequency of usage of teaching and learning materials and its efficiency through FPE

Methodology

Design

The study adopted a descriptive research design as it is concerned with describing, recording, analyzing and interpreting conditions that exist or existed. According to Gay, (1992), a descriptive design enables the researcher to collect data from persons in a wide geographical area through questionnaires in order to answer research questions.

Area of Study

The study area was Busia sub county, Busia County. Busia County is one of the four counties in the former Western Province of Kenya. Sixty six (66%) per cent of the people live in absolute poverty (Busia district development plan for 2008-2012). Busia sub county borders Lake Victoria to the south west, the republic of Uganda to the west, north and north eastern. It has a population of 943,946 people with a population density of 439 people per square kilometer. The Busia County has an age distribution of 0-14 years at 47.9%, 15-64 years at 48.4% and 65+ years at 3.7% and a total of only 420 public primary schools in the entire county with a pupil population of 653,000 (Kenya National Population and Housing Census, 2009). According to a Kenyan child labour baseline survey for Busia Sub County (KNBS, 2011), 63.2% of the population in Busia Sub County, is below 20 years with a population pyramid depicting a youthful age set. The sub county is made up of two divisions; Matayos and Township, bordering Uganda to the west, Teso south to the north, Namable to the East and Samia Sub County to the south. It covers an area of approximately 1695 square kilometers and provides an entry point to Uganda through Kenya. The sub county has 46 public primary schools only and very few private primary schools. The area is occupied by the Luhya ethnic group with its capital headquarters at Busia town. The choice of Busia Sub County is relevant to the study because it has a high number of children orphaned by the HIV/AIDS whose education before the introduction of FPE was a major challenge. Also, the wider Busia County has very high HIV/AIDS prevalence of 14% compared to the national prevalence of six per cent (6 %). As such, many children have lost their parents to the disease (District Development Plan 2008-2012). This also raises security concerns for the very individual children which affect their school going negatively.

Study Population

Busia Sub County comprises of 46 Public primary schools with 653,000 primary pupils' population. The 46 public primary schools formed the target population for this study since they are the ones affected more directly by the FPE programmes. The sample comprised of public primary schools in both the administrative divisions in the sub county. The respondents included, head teachers, and teachers of public primary schools in the sub county. Accordingly, proportionate sampling was done to obtain 30% from each category and administrative units. The distribution of the population in each category and administrative units in Busia Sub County is shown in the table 3.1

Table 1: The Study Population distribution per division

| Administrative unit | No of primary schools | Total No. H/Teachers | No teachers |
|---------------------|-----------------------|----------------------|-------------|
| Matayos | 22 | 22 | 269 |
| Township | 23 | 23 | 396 |
| Total number | 46 | 46 | 605 |

Source: Sub County Education Office Busia Sub County January 2013 returns

Sample size and sampling procedure

The sample size of 30% of the remaining 36 public primary schools after leaving out ten of the schools used in piloting was used and proportionate allocation of 30% to obtain the study respondents from each administrative unit (Mugenda and Mugenda, 1999) then stratified and simple random sampling techniques and later stratified sampling to achieve desired representation from the sub groups, which is the teachers, and head teachers, lastly, simple random sampling to select the respondents from each stratum.

Research Instruments

Questionnaires with a representative array of the education implementers within the sub county

under study collected data. The instruments elicited information that would assist the researcher to answer the research questions. The constructs of the questionnaires and the interview schedule operationalized both FPEs' teaching and learning materials and academic performance among public primary schools through an extensive review of the relevant literature.

Questionnaire

The questionnaire operationalized both FPE and academic performance among public primary schools in a semi structured manner containing open ended, closed ended and contingency questions. Part A of the questionnaire dealt with the personal background of the respondent and other relevant type of data. The requirements of the research led to the selection of both qualitative and quantitative data collection methods. The questionnaire was relevant for this study since some of the respondents are busy people and found filling the questionnaire at their own free time most appropriate. Part B of the questionnaire dealt with a check list of the teaching and learning materials, designed in a likert scale. This provided quantitative data which was analyzed by the parametric statistics of the Analysis of Variance (ANOVA) at ($\alpha < .05$; df 4, 5).

Interview Schedule

To assess the impact of the FPE policy, the research required that the researchers interview the head teachers of public primary schools in Busia Sub County. Data from schools, government offices and reports on FPE were also a requirement, which later assisted in the discussion and analysis of the policy. The researchers used face to face interviews, as they tend to prompt self-censoring on some respondents where seven head teachers, 22 deputy head teachers, and sixteen individual students responded. The semi-structured interviews allowed the respondents a leeway on responses and allowed the interviewer to pickup on other issues raised by respondents while keeping research objectives in mind.

Reliability of the Instruments

To determine the reliability of the research instruments, a pilot study was conducted. Ten public primary schools were randomly selected. To determine the stability of the scores obtained a test - retest was used and the scores obtained were correlated with the first scores. The instrument was taken to be reliable as the instrument gave a test-retest reliability estimate of 0.8. According to Schultz & Gessaroli, (1987) a test retest correlation score of 0.7 is reliable enough.

Validation of the Instruments

This study utilized content validity which according to Mugenda and Mugenda (2003) is a measure of the degree to which data collected by use of particular instruments represent a specific domain of indicators or content of a particular concept. To establish this, two research experts from Masinde Muliro University of Science and Technology subjected the instrument to scrutiny. Their useful suggestions and corrections were reflected in the final modification of the items of the instruments. Their comments helped improve the clarity of the items in the research instruments.

Data Analysis

Data collected was analyzed according to the research objectives. Raw data was coded into the Statistical Package for Social Sciences (SPSS) and used to analyze the same data. A blend of Descriptive statistics and inferential statistics such as the Analysis of Variance (ANOVA) at 0.5 confidence level was also applied in establishing the relationship between the teaching and learning materials and the learning process among public primary schools in Busia Sub county, and subsequently determine the effect of FPE's teaching and learning materials on academic performance. Qualitative data, analysis was done descriptively by the use of means, charts, and percentages and findings presented by cross tabulations, charts and graphs.

Findings

The study established that not all the required instructional resources were available for use by both teachers and pupils in public primary schools. Book to pupils' ratio was conforming to current ratio of 1:1 per subject per class. Chalkboard and textbooks were widely used. Other instructional resources were not utilized. Inadequacy of instructional resources in some schools compromises equity in access to resources by pupils.

Trends in the Provision of teaching and learning materials under Free Primary Education in Kenya

The study sought to find out the trends in the provision of teaching and learning materials through FPE among public primary schools in Busia Sub County. To achieve this objective the teachers in primary schools in Busia Sub County, were asked to give their views on the availability of teaching and learning materials in their schools. The findings were as shown in Table 2.

Table 2: Availability of teaching and learning materials

| Availability of Teaching and Learning Materials | Percentage (%) |
|---|----------------|
| Very Good | 37.5 |
| Good | 56.2 |
| Poor | 2.5 |
| Very Poor | 3.8 |
| Total | 100 |

Teaching and learning materials are defined in terms of text books, exercise books, radios, projectors, charts, chalkboards, computers, maps, rulers, geometrical sets and pens while the primary schools being targeted were public primary schools. The results reveal that 56.3% of the teachers in public schools are of the view that teaching and learning materials are fairly available in all public primary schools in Busia Sub County while 37.5% of the teachers hold the view that availability of learning and teaching materials is good among all the public primary schools in Busia Sub County.

However, Small percentage of teachers hold the view that provision of teaching and learning materials is poor (2.5%) and very poor (3.8%). The analyzed results are shown in Figure 1.

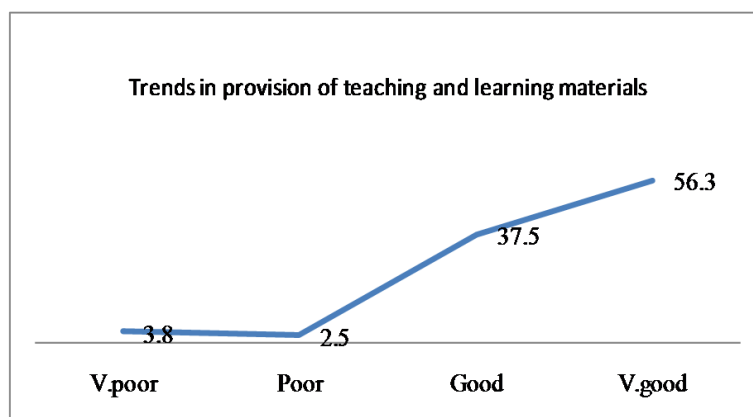


Figure 1: Trends in the Provision of Teaching and Learning materials under Free Primary Education in Kenya

The provision of teaching and learning materials to primary schools is as a result of an existing government policy. A policy is a deliberate plan of action to guide operations and achieve rational outcomes about an area of need. Several policies have been formulated to guide the provision of universal education for all worlds over. One such policy is contained in the World Conference on Education for All (1990). According to Jomtien (1990), the Framework of Action of the World Conference on Education for All each country is left to decide the way to address issues to do with the provision of basic education according to the national context. It goes on to add that basic education must correspond to actual needs, interests, and problems of the participants in the learning process. The scope of basic learning needs and how they should be met varies with individual countries and cultures, and inevitably, changes with the passage of time.

A fundamental policy of the Government of Kenya, derived from Jomtien Declaration is to provide quality basic education to all its citizens, both as a basic human right in a democratic society and as a socio-economic developmental goal. This policy derives its impetus from the Universal Declaration of Human Rights which asserts that 'everyone has a right to education'. This is evident in the formulation of policy documents



such as the Child Act, Cap 586 (2001) of the laws of Kenya, Sessional Paper No.1 (2005) on policy framework for Education, Training and Research, through which the government is required to increase educational opportunities for all Kenyans. In addition, the current trends in the acquisition of knowledge, skills and attitudes in the learning process are mainly influenced by the use of learning materials.

Many learning theories have advocated the use of teaching and learning resources to reinforce learning. For instance, constructivist learning theorists such as Brigg (1977), note that the use of such media involves learners vicariously but meaningfully in the learning process. This puts the role of the teacher as a facilitator of knowledge rather than a provider of knowledge.

According to the MoEST, (2005) and TSC, (2005), teaching and learning materials in possession of pupils are in form of exercise books, something to write with, and a ruler to ensure that the pupils participate reasonably in learning activities in the classrooms. Pupil also gets to have the use of a textbook (especially for the core subjects, such as reading, mathematics, and science). Use of textbooks by the pupils is preferable because it enables them undertake academic activities at home, such as doing homework and revising school work. They are only able to do so if they have been provided with them. As shown by the results in table 2 and figure 1.

The positive results, from the study could be attributed to the existence of such a policy that governs the distribution of these institutional materials in most of the public primary schools. These findings concur with Briggs (1977) arguments that acquisition of knowledge, skills and attitudes are enhanced with the use of teaching and learning materials.

CONCLUSIONS

This study sought to establish the effect of teaching and learning materials as provided by FPE on academic performance among public primary schools in Busia Sub County. The findings of the study described herein indicate that the selected materials which are related to the basic contents of a course or a lesson help in-depth understanding of such a lesson by the pupils. That is, they make the lesson attractive to them, thereby arresting their attention and thus, motivate them to learn. Therefore, from the results of the study, adequate supplies of teaching and learning materials have significant effects on pupils' performance in academic performance. Further, the results revealed that schools with adequate teacher quality and material resources showed superiority in academic achievements than schools without adequate teacher quality and material resources.

RECOMMENDATIONS

Following the findings of the study, the following are the recommendations: Since there is a positive trend in the provision of teaching and learning materials under FPE, other types of teaching and learning materials should be included in the list of procurement to cater for multiple teaching and learning experiences such may include among others ICT facilities for teaching and learning.

It is also recommended that there is need to in-service head teachers and teachers on the variety of teaching / learning resources available for use. The government should review the recommended ratio to books.

There is need for the government to train/induct school Instructional Material Selection Committee (SIMSC) on the procurement procedures to ensure adequacy of resources and finally close supervision, monitoring and evaluation should be done to ensure appropriate utilization of funds.

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