Use of Educational Facilities and Quality of Teaching in Selected Primary Schools in Buhweju District

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ABSTRACT

The study assessed the relationship between the use of educational facilities and the quality of teaching in primary schools in the Buhweju District. It was guided by the following objectives: to establish the availability of educational facilities in primary schools, to find out the level of use of educational facilities, to examine the quality of teaching in primary schools and to assess the relationship between the use of educational facilities and the quality of teaching. The study was carried out using a cross-sectional survey design. The targeted population for this study included head teachers, chairmen, School Management Committee, and teachers. The study involved both qualitative and quantitative approaches. The study findings showed that the level of use of educational facilities was good (agree), with an overall mean score of 3.76. The study findings revealed that the quality of teaching was good (often) with a (mean score of 3.77). The study findings showed that there is a statistically significant relationship between the use of educational facilities and the quality of teaching $r = 0.177$ at $P$ value $= 0.019 < 0.05$. It was concluded that the level of use of educational facilities in selected primary schools in the Buhweju District was good. It was also concluded that the quality of teaching in selected primary schools in the Buhweju District was good. It was further concluded that there was a statistically significant relationship between the use of educational facilities and the quality of teaching. Therefore, the effectiveness of the use of educational facilities influences the quality of teaching positively. It was recommended that the school administrators should make sure that there is an adequate good structure in classroom buildings. Headteachers should ensure the effective use of educational facilities to increase the quality of teaching in selected primary schools in the Buhweju District.

APA CITATION

Tukundane, E., Sudi, H. & Jean, T. (2022). Use of Educational Facilities and Quality of Teaching in Selected Primary Schools in Buhweju District East African Journal of Education Studies, 5(3), 206-215. https://doi.org/10.37284/eajes.5.3.920.
INTRODUCTION

Tatlah et al. (2015) viewed the use of educational facilities as the extent of usage of school buildings, laboratories, libraries, assembly-ground, flower gardens, school gardens, volleyball fields, chairs, desks, chalkboards, and so on. Sholihah (2019) agrees that the goal of functional education is to prepare its beneficiaries with all it takes to adjust well in the societies, contribute meaningfully to the development of society as well as live a fulfilled life. It was therefore stressed that the above is possible through the effective use of educational facilities in the management of institutions of education. As Eze, Chinedu, Eze & Bello (2018) stated that the use of educational facilities enables the teacher to accomplish his/her task effectively. A discussion on the use of educational facilities will naturally focus on the availability, adequacy and utilisation of these educational facilities.

According to the US General Accounting Office (GAO) (2010), almost three-fourths of existing US schools in 1996 were constructed before 1970. Of these schools, about one-third of schools had a need for extensive repair or replacement, and almost two-thirds had at least one inadequate building feature such as substandard plumbing, roofing, or electrical systems. The situation is not any different in most European countries as most schools’ infrastructure was built in the mid-20th century (Falch & Henten, 2010). The existence of old infrastructure in such schools has a bearing on the quality of teaching, as students and pupils may feel uncomfortable in such an environment. Such infrastructure inhibits the vision, ergonomics, and comfort of learners.

The education and schools in Africa have changed a lot over time. Ever since it was first introduced to Africa (Bantwini, 2010), it has been an important part of the history of the continent. The changes in education system in Africa have greatly changed in various spheres, including but not limited to school facilities (Mouton et al., 2012). From the beginning of the 20th century, all through the mid and the end of the 20th century, there has been a growing number of schools and institutions, especially in the sub-Saharan continent. The major indicator for the changes in educational institutions has been school infrastructure in different countries across the continent. Hardman et al. (2011) noted that school facilities have a strong bearing on the quality of teaching in primary schools. He further asserted that school facilities improve the learning environment, which is a strong component of the teaching and learning process.

When Uganda gained its independence in October 1962, it came with a number of challenges, one of them being the lack of enough qualified personnel to provide services for the country (Ayikoru, 2015). Therefore, the education system in Uganda had to be restructured to remove the inferiority feeling from the minds of Ugandan and African students.
In this effort, two important slogans were inaugurated, namely “the creation of African identity” and “the development of African personality.” Uganda’s education sector suffered devastating setbacks in the 1970s owing to civil war and unrest that characterised the country at the time. School infrastructure was run down, and manpower was lost mainly to brain drain as people fled the country to seek refuge elsewhere. This did not last since the NRM government shortly came to power and suggested reforms to revamp the education system. The programmes that the system came up with were mainly to address issues of easy access to education for all (Mabingo, 2017). This was to do away with inequality among citizens. A lot of progress has been made over the years; this could be reflected in the; introduction of Universal education, the construction of seed schools, the introduction of the Students’ Loan Scheme, the rehabilitation of the already existing schools, and the initiation of several avenues to increase access to education.

It is in this perspective that to improve the quality of educational facilities in primary schools in the Buhweju district, the provision of various educational facilities has accelerated the quality of teaching. Despite the efforts made by the government and parents to accelerate the provision of educational facilities with the purpose of improving the quality of teaching, a wide gap still exists between the current situation and the national as well as international standards. For instance, in the financial year 2012/13, only 14.3% of the national budget was spent on education, only 67.5% of teachers were qualified to teach at the primary level in 2012, the national student-textbook ratio was 5:1 while the target was to make it 1:1 by 2020. Moreover, while the target was to have 90% and 95% of pupils passing in grades one and two in 2016 and 2017, respectively, only 88.2 passed in 2017, while areas like Buhweju Districts have been at a disadvantage over the years in terms of school facilities (Ministry of Educational report, 2017).

According to Najjumba et al. (2013), Basic Requirements and Minimum Standards (BRMS) indicators for Educational Institutions spell out clearly the educational facilities are supposed to be in place for an educational institution to operate, without forgetting classroom facilities like chalkboards, a class timetable displayed, a teacher’s chair, and table among others. Buhweju district has a total number of 53 government primary schools, and all the schools witness high rates of teacher absenteeism, inadequate classroom control, laxity in nurturing desired pupils’ behaviour, ineffectual teaching, and pupil evaluation (Report of the Inspector of Schools in Buhweju district, 2018), and high failure rates from primary leaving examinations (PLE) administered by Uganda National Examinations Board (UNEB, 2016, 2017, 2018). This implies that most of the teachers in these schools register poor teaching quality. Though the ministry of education has raised concerns about improving the quality of teaching in most schools in districts like Buhweju, the result of the set factors within the educational system are believed not to have led to better service delivery outcomes of teacher’s performance, including poor lesson plan preparation, schemes of work, and ineffective supply of direct resources/inputs to schools such as infrastructure, learning and teaching materials among others. This therefore, calls for an investigation into the use of educational facilities like chalkboards, relevant textbooks, pieces of chalk, wall charts, desks, and tables, then the quality of teaching which was observed through the preparation of lesson plans, schemes of work, content delivery, feedback, record of work covered, tests and record keeping in Buhweju District.

**Purpose of the Study**

The purpose of the study was to assess the relationship between the use of educational facilities and the quality of teaching in primary schools of Buhweju District.
THEORETICAL REVIEW

This study used the Economic Theory of Infrastructure by Frischmann (2005). The theory focuses extensively on demand-side considerations and fully explores how infrastructure resources generate value for consumers (Frischmann, 2005). According to him, the theory of infrastructure touches on three key insights that have emerged from this demand-side, value creation-focused analysis. It explains that infrastructure resources are fundamental resources that generate value when managed in a wide range of production processes. Second, the outcomes from these processes are often public and nonmarket goods that generate positive externalities that benefit society. Third, managing infrastructure resources in an openly accessible manner may be socially desirable when it facilitates these downstream activities. The theory was viable for this in that when educational facilities were available, there was a likelihood the quality of teaching, which is an immediate outcome, would be realised, and the reverse is true.

METHODOLOGY

Research Design

The study was carried out using a cross-sectional survey design to investigate the attitudes, opinions, and feelings as well as experiences of head teachers and teachers in the selected primary schools in Buhweju District.

Population and Sample size

Target Population

Buhweju District has 98 primary schools and these are 53 government aided and 45 private primary schools (DEO report, 2016).

Sampling and Sample Size

This study involved both probability and non-probability sampling, which included purposive sampling, stratified random sampling and simple random sampling. According to Etikan et al. (2016), purposive sampling is an occasion based on previous knowledge of a population and the specific purpose of the research investigators for use in personal judgments to select a sample.

Purposive sampling was used to select head teachers of schools who were the coordinators or supervisors (administrators or executors) of all school activities including the provision of educational facilities to teachers. Stratified Proportionate random sampling was used to select teachers because they had relevant and reliable information about educational facilities and Quality of Teaching matters in schools. The sample participants’ categories were six chairmen of the school management committee, six heads of schools, and 278 teachers from 98 primary schools in the Buhweju district. Therefore, the total number of participants was 290.

Research / Data Instruments

Data collection instruments included questionnaires, inventories, interview schedules or guides, documentary reviews, observation checklists, rating scales, and survey plans or any other forms which are used to collect information on substantially identical items from 10 or more respondents. Respondents could be individuals or organisations from which information is collected (Singh, 2014).

Data Analysis

In this study, quantitative data from the questionnaires were analysed using descriptive and inferential statistics of the data, which was derived from the responses to the research questions. The researcher used a statistical package for social scientists (SPSS) to analyse quantitative data. Descriptive statistics such as frequencies, percentages, mean, and standard deviations were used in presenting the findings.

Qualitative data was analysed using thematic content analysis and presented using verbatim
quotations. Data from the participants were read and re-read, and condensed into themes that were later sieved categorically to identify emerging themes. Narrative reasoning and verbatim quotations were utilised in presenting the findings.

**Ethical Considerations**

The researcher ensured that respondents’ consent was sought from the respondents to participate in this study. A consent form was designed, and respondents were duly informed about its implications. The researcher assured the respondents that the information gathered was treated with confidentiality. The researcher then compiled the data collected into one pool, and the SPSS program was used to sort the data collected. Respondents were guaranteed confidentiality.

**RESULTS**

**Description of Independent Variable: Use of Educational Facilities**

This section describes the independent variable (Use of Educational Facilities) conceptualised as; the availability of educational facilities, adequacy and frequency of use of physical educational facilities, equitable distribution of teaching-learning materials, and use of information and text resources. Section B of the questionnaire describes the independent variable (Use of Educational Facilities) using 9 items. The rating was done according to the Likert scale ranging from 1 to represent strongly disagree up to 5 to represent strongly agree (Creswell, 2003). Table 1 shows teachers’ responses and descriptive statistics on the use of educational facilities in selected primary schools in the Buhweju District.

**Table 1: Use of Educational Facilities**

| Items                                                                 | Means |
|----------------------------------------------------------------------|-------|
| We have enough chalkboards and we utilise them to aid in teaching   | 3.79  |
| Our library is used regularly to get relevant textbooks              | 3.95  |
| We have enough classrooms to accommodate our pupils while teaching. | 3.92  |
| We have sports facilities for co-curricular activities.             | 3.82  |
| We have sufficient chalk in stock to ensure continuity in teaching. | 3.65  |
| There are wall charts in classrooms to aid in the teaching process.  | 3.80  |
| Our school have enough desks and tables to prepare a conducive teaching environment. | 3.61 |
| We have sufficient water in the school to sustain the sanitation of pupils | 3.67 |
| We have teachers’ quarters to accommodate teachers                  | 3.64  |
| Overall mean score                                                   | 3.76  |

The overall mean score of 3.76 implies that the level of use of educational facilities was good (agree). The above study findings consisted of responses from the interviews as it was revealed that the quality of educational facilities in selected primary schools in Buhweju District was good.

As one of the head teachers said that

*“We had a good quality of educational facilities in this school. This has eased teaching and learning processing as well as improvement in academic performance of pupils”.*

The above study findings imply that there are good quality educational facilities in selected primary schools in Buhweju District. The above study findings are in agreement with Schneider and Shang (2011), who revealed that the physical location and
poor school structures contribute to poor Quality of Teaching. In the study conducted in Nairobi, about 48% of teachers who transferred to other schools and 39% of teachers who left teaching cited the need for significant repair of educational facilities as a source of dissatisfaction. Teachers also pointed out that the external noise from urban centres, cars, and industrial areas was also a great factor in the Quality of Teaching caused by poor building facilities.

Similarly, Khan and Iqbal (2012) showed that the use of educational facilities is a basic ingredient for the quality of teaching so as to achieve the intended goal of the school program. The idea of emphasising the quality of teaching is a complex activity that requires proper use of educational facilities such as standardised buildings and classrooms with their facilities, instructional materials, and equipment for a child’s development. Additionally, Agezo (2010) noted that it is crucial that school administration should provide adequate educational facilities for use so as to attract the best and brightest teachers to work. For example, building deficiencies impair the Quality of Teaching and contribute to health and safety problems of staff and pupils.

**Description of Dependent Variable: Quality of Teaching**

This section describes the dependent variable (quality of teaching in selected primary schools) conceptualised as; preparation, content delivery and assessment. Section C of the questionnaire describes the dependent variable (quality of teaching) using 24 items. The rating was done according to the Likert scale ranging from 1 = Not always, 2 = Whenever Possible, 3 = Sometimes, 4 = Often and 5 = Always. *Table 2* shows teachers’ responses and descriptive statistics on the quality of teaching in selected primary schools in the Buhweju District.

**Table 2: Quality of teaching**

| Average mean scores       | Mean scores |
|---------------------------|-------------|
| Preparation               | 3.93        |
| Content delivery          | 3.75        |
| Assessment                | 3.63        |
| Overall mean scores       | 3.77        |

The overall mean score for quality of teaching was 3.77, which meant that the quality of teaching was good (often). The above findings are in line with responses from interviews as they were given by head teachers and the school management committee, as it was revealed that the quality of teaching was effective.

In support of this statement, one of the head teachers mentioned that

“Our teachers are well qualified; therefore, they have skills and experiences in making schemes of work, lesson plans, lesson notes, and lesson presentations. These have contributed to good quality of teaching and learning processes”.

The above study findings imply that there is an effective quality of teaching in selected primary schools in the Buhweju District. These findings agree with Marginson (2011) who argued that the use of educational facilities does not guarantee the quality of teaching, but the proper utilisation of the educational facilities has a great value to the quality of teaching.

Also, the findings are in agreement with Boyd et al. (2011) who found that where the problems with working conditions are serious enough to impinge...
on the work of teachers, they result in higher absenteeism, reduced levels of effort, and lower effectiveness in the classroom, low morale, and reduced job satisfaction. Where working conditions are good, they result in enthusiasm, high morale, cooperation, and acceptance of responsibility.

**Relationship between the Use of Educational Facilities and the Quality of Teaching**

The relationship between the use of educational facilities and the quality of teaching in the Buhweju District was explored by using the Pearson correlation. The correlation was used to describe the strength and direction of the linear relationship between the two variables. The mean scores of independent variables (use of education facilities) were correlated with the mean scores of dependent variables (quality of teaching) with the help of the SPSS program. At the Bivariate level, the Pearson correlation coefficient was used to determine the relationship between the two variables. The correlation shows a number of significant relationships between the two variables Table 3.

**Table 3: Correlation between the use of educational facilities and the quality of teaching**

|                      | Use of educational facilities | Quality of teaching |
|----------------------|-------------------------------|---------------------|
| Use of educational   | Pearson Correlation: 0.177*   | 0.177*              |
| facilities           | Sig. (2-tailed): 0.019        | 0.019               |
| N                    | 174                           | 174                 |
| Quality of teaching  | Pearson Correlation: 0.177*   | 1                   |
|                      | Sig. (2-tailed): 0.019        |                     |
|                      | N                             | 174                 |
| * Correlation is significant at the 0.05 level (2-tailed). |

The results in Table 3, the 2-tailed significance test, show a correlation coefficient of 0.177, indicating that there is a weak but statically significant positive relationship between educational facilities and the quality of teaching since the correlation coefficient was close to Zero, and the P value of 0.019 < 0.05 indicates that there is a statistically significant relationship between use of educational facilities and the quality of teaching. Therefore, the research hypothesis, which stated that there is a statistically significant relationship between the use of educational facilities and the quality of teaching in primary schools in the Buhweju District, was accepted. Additionally, the statistically significant implies that such a finding is rare and may not be overlooked.

In addition, responses from interviews revealed measures to improve the quality of teaching in primary schools in the Buhweju District. These included.

One of the school’s management committed mentioned that:

“School administrators should encourage the support of parents and other stakeholders to provide physical input and other employee benefits for teachers to attain good quality of teaching in selected primary schools”.

One of the head teachers said that

“The ministry of education should reinforce supervision-based training, seminars, workshops, and refresher courses to promote quality teaching in facilities, and head teachers should also ensure effective use of educational facilities to increase the quality of teaching”.
The above study findings are in line with Asadi et al. (2016), who indicate that the use of educational facilities had a significant relationship with resource availability in high-performing schools and low-performing schools. Also, the study indicated that most institutions are faced with challenges such as a lack of facilities like libraries and inadequate instructional materials and these factors tend to have a negative effect on the quality of graduate teachers produced.

Similarly, according to Shah et al. (2012), there is a very strong positive significant relationship between the use of educational facilities and the quality of teaching. Additionally, according to Ngware et al. (2011), schools endowed with more facilities perform better than schools with fewer. Koomen (2016) also supports that the quality of teaching is affected by the quality of teaching and learning materials. Mwiria (2008) further noted that institutions which adequately use educational facilities such as textbooks help teachers to compile their schemes and lesson plans more than those who poorly use educational facilities. Therefore, poor quality of teaching could be attributed to inadequate teaching and learning materials and equipment.

**CONCLUSIONS**

It was concluded that the level of use of educational facilities in selected primary schools in the Buhweju District was good, which indicated that educational facilities include; chalkboards to aid teaching, relevant textbooks, classrooms, sports facilities for co-curricular activities, charts in classrooms, and desks.

It was also concluded that the quality of teaching facilities in selected primary schools in the Buhweju District was good. These were characterised by good preparation for teaching, effective content delivery and effective assessment.

It was further concluded that there was a statistically significant relationship between the use of educational facilities and the quality of teaching. Therefore, the effectiveness of the use of educational facilities influences the quality of teaching positively.

**Recommendations**

**Use of Educational Facilities**

The school administrators should make sure that there are adequate good structured classroom buildings. The Educational Ministry should have a policy in place to ensure the provision of certain facilities like physical staff common rooms, computer laboratories, adequate classroom blocks, library and others are in place. Teachers should be trained and/or retrained on the use of school facilities to ensure their adequacy in using them.

**Quality of Teaching in Facilities**

School administrators should encourage the support of parents and other stakeholders to provide physical input (that is, physical structures), material input (teaching and learning material) and other employee benefits for teachers to attain good quality teaching in facilities. The ministry of education should reinforce supervision-based training, seminars, workshops, and refresher courses to promote quality teaching in facilities.

**Relationship between the Use of Educational Facilities and the Quality of Teaching**

Headteachers should practice ensuring the effective use of educational facilities to increase the quality of teaching in selected primary schools in the Buhweju District. The government and the Ministry of Education and Sports should provide mandatory policy guidelines on the use of educational facilities in all schools to facilitate the quality of teaching in selected primary schools in the Buhweju District. The school administrators should ensure good monitoring and evaluation of teachers’ quality of teaching in selected primary schools in the Buhweju District.
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