

Management of School Facilities and Pupils' Academic Performance in Government primary schools in Kaduna South Local Government Area of Niger State, Nigeria

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ABSTRACT

The study was conducted on the management of school facilities and pupils' academic performance in Government primary schools in Kaduna South Local Government Area of Niger State, Nigeria. The research design adopted for this study was the ex-post facto research design and the population of the study was all primary school pupils in public pupils' in Kaduna South Local Government Area of Niger State, Nigeria. Numbering 1,061. A sample of 181 respondents (13%) of the population of pupils in the study area was employed and the instrument used for data collection in this study was developed by research titled "School Facilities and Pupils' academic performance Questionnaire (SFSPQLQ)" which was subject to scrutiny by the two experts in Measurement and Evaluation and Educational Management respectively. The reliability of the instrument was established using the Cronbach Alpha reliability method and the coefficient of 0.67 to 0.75 shows that the instrument was reliable for data collection. To analyse the data, One-way ANOVA was adopted and the results of the findings revealed that there is a significant influence of library facilities, laboratory facilities and play-ground on pupils' academic performance in Government. It was recommended among others that the government should provide effective and efficient library facilities to enhance teachers teaching and student performance.

Keywords: Management, School, Facilities, Academic Performance

INTRODUCTION

No organization can survive without education. This means that education is a vital tool for academic excellence and national development. Quality education is a *sin qua non* to quality educational facilities. This is because educational facilities support the operation of an organization or an institution to carry out its daily activities and to promote growth and development in such an organization or institution. To this end, facility entails the entire environment of the school or an organization, it refers to both the physical and material resources available to the pupils and teachers in the school to facilitate the learning-teaching process. The classrooms; the libraries and the laboratories for sciences are the three main areas of facilities identified in the school system or environment (Onyeji, 2000). Yeloye (2002) posits that the availability of libraries as one of the school facilities, a great many of our primary schools have no functional libraries, and where some libraries are found, there are no new or current books that are relevant to the current primary school programmes. In effect, most of the primary schools in Nigeria have no library facilities, especially in Lagos State.

On science laboratories, Olarewaju (2004) claims that only a few schools have science laboratories that are well equipped to carry out scientific experiments in courses such as biology, physics, and chemistry. A good number of schools teach biology or chemistry as if they are non-science subjects without a laboratory. Some other schools teach the three branches of science without laboratories in the hope that they would use other schools' laboratories during their examinations or compel pupils' to contribute money for the purchase of science equipment through the Parent-Teachers Association (PTA). It should be noted that the greatest failure rate is in the sciences because our schools lack the essential science materials but rather, resort to theoretical science without the use of a laboratory. The contention is that the nation has been unfair not only to pupils' in our primary

schools but also to herself. This is because no nation can develop technologically through theoretical teaching of science subjects, under poor educational facilities, no meaningful teaching and learning can take place, and the normal refrain in the educational circle is that all is well with our primary schools.

A study conducted by Adefarati (2002) contended that to learn is to acquire and apply all in all strategies to learn, experiences and educational attainment. The practice of studying is an activity to read, take notes and hold groups where children undertook decisions for achieving expected outcomes. Reading practice implies the expression of similarities to reading by children. According to Suskie (2009). The school library is a fundamental part of teaching and learning in primary schools that afford resource accessibility that supports the curriculum. In primary schools' pupils use the library to file their knowledge and to supplement what they are taught by their teachers. According to Akala, (2002), it is an example that children plan how to read with the purpose to overcome the challenges of lacking skills related to new knowledge in globalization and the technological era in the world. Andy (2002) evidenced that library facilities are linked with life-long reading and learning. The author argued that school library facilities are very important for pupils' to enhance their reading skills and achieve high academic performance.

An empirical study by Atanda (2014) sought to investigate the impact of school libraries on pupils' academic achievement in the Iwo Local Government Area of Osun State. Despite the importance of the school library, its operation in terms of compliance with the academic achievement of pupils' cannot be overemphasized. Hence the assessment of the student characteristics are determined to know the composition of the pupils' to the school library patronage. Data were gathered using the school record of examinations taken by SSS 3 pupils', particularly English Language. The record of examinations is taken by the randomly selected primary school pupils' of the area till the time of the study. Variables such as sex were investigated. Data analysis was descriptive and analytical using t-test contingency. The findings revealed that the provision and utilization of school libraries have no significant effect on senior primary school pupils' academic achievement. The data generated during the study were analyzed using a t-test at a 0.05 level of significance. On the strength of these findings, the null hypothesis being tested was rejected. Therefore, the study recommended that all pupils', both male and female should patronize the library because it will assist them in their academic programs.

Another empirical study by Kojo, Baffour and Banleman (2018) study sought to assess the impact of school libraries on pupils' academic success in Bunkpurugu Yunyoo District of Northern Ghana. The descriptive survey design was employed to determine the level of impact on the various variables deplored for the study. The population for this study was made up of Circuit Supervisors, teachers and pupils' within the study area. A purposive sampling technique was employed to select three junior high schools with libraries and another set of three without libraries. Krejcie and Morgan (1970) table was used to select (150) pupils' from a population of (240). A simple random sampling technique was used to proportionally select 25 respondents from each of the six schools. The instruments used for the study include a questionnaire, interviews, observation and existing document analysis. Key informants of 10 were interviewed and a visit to each of the schools included in this study was undertaken to observe how library utilization could enhance pupils' academic achievement. Paired t-test calculated at ($p \leq 0.05$) was used to determine differences in pupils' academic achievement. The results indicated a positive significant difference in the academic achievement of pupils' in schools with libraries and those without libraries in all the items that were investigated. The study recommends a policy of 'one rural school, one library' stocked with relevant reading materials and the setting up of 'Reading Clubs' in rural schools to sustain pupils' interest in reading.

Goodall and Pattern (2011) conducted studies on the impact of school library use and the academic performance of pupils' at Huddersfield University in the United Kingdom. The researchers employed a quantitative method to carry out the research. A set of questionnaires was used to elicit data from the participants. The findings of the study showed a positive relationship between the use of the library and academic achievement. They found that reasonable provision of library services was a

predictor of pupils' academic achievement. They observed that pupils' often made use of library materials, which enhanced their studies in school. They concluded that some pupils' borrowed books and other materials and read them in the library while others did not make use of the library at all. Thus, the more pupils' made use of the library, the more it improved their academic achievement. It was recommended that future studies should be done using a larger scope to see whether similar findings would be found or not.

Elechi and Eya (2015) investigated the availability and utilization of Government laboratory facilities in junior primary schools as a panacea for reform in STEM Education. Three research questions were posed to guide the study. The data were collected using a checklist and a teacher questionnaire and the data obtained were analysed using frequencies and percentages. The result showed that most junior primary schools do not have laboratory equipment and materials needed for teaching Government and there were no existing Government laboratories. It was also found that most Government teachers do not utilize even the few available facilities for teaching. Some of the teachers' reasons for not using the equipment and materials include lack of adequate laboratory facilities, lack of teachers' guides and practical manuals.

Omiko (2015) Investigated laboratory teaching: implication on pupils' achievement In Chemistry in Primary Schools and the results showed that the use of the laboratory helps to: develop scientific attitudes in the pupils' towards the learning of chemistry especially practical, develop scientific skills for problem-solving in pupils' among others. It also confirmed significant differences in the performance of pupils'. Abidoye, Adebisi, Rihanat and Aliyu, (2022) studied the availability of laboratory facilities on pupils' performance in upper basic schools in Kwara State, Nigeria. Abudu and Banjoko (2013) assessed the availability of laboratory resources and pupils' performance in Chemistry High School. The participants in the selected Ijebu Ode Government Local in Ogun State were 120 pupils' and five chemistry teachers. Participants completed the availability and use of the inventory type (questionnaire). The correlation research design was adopted for the study. The data were analyzed based on two hypotheses using Pearson product-moment correlation. The result shows that there is a significant relationship between the use of laboratory resources and pupils', achievement in chemistry.

Etukudo (2004) opined that the laboratory method of teaching is presumed to be capable of fully involving the individual learner in the learning and teaching activities as well as helping to remove individual differences and absent-mindedness. He added that the laboratory offers the singular privilege of manipulating apparatus or teaching aids to every student to obtain a desirable result. Also, he said that the use of instructional materials which laboratory techniques offer, enhances a better understanding of the curriculum content. Etukudo (2004) said that experimentation and laboratory teaching is good pedagogy for the discovery of learning and mastering abstract skills as well as the building up of low-ability learners. The teacher must also know to get the equipment/facilities and the situations where they can effectively be put to use. However, Iwovi (1999), observed that lack of science teaching equipment in our laboratories is one of the major problems facing science teaching in Nigeria. Based on the nature of biology and the teaching of the subject. Abdulrahman (2009) believes that practicing biology teachers who are not trained within scientifically rich environments or moderately rich biology environments cannot utilize any available resources or improvise in the absence of such resources.

A study by Oguma (2018) study looked into the availability and use of laboratory facilities in schools, the frequency of pupils' participating in laboratory activities in schools, whether or not exposure to laboratory activities improves academic performance, and whether or not exposure to laboratory activities develops scientific attitudes in pupils' toward chemistry learning. The survey descriptive research design was used in this study. The survey yielded a total of 141 valid replies. The Cognitive Learning Theory was used in this investigation. The findings revealed that the availability of laboratories in primary schools is relatively high, however, most are not appropriately equipped, based on the replies gathered and analyzed. Furthermore, the findings revealed that pupils' are

regularly exposed to laboratory activities in schools. Pupils' academic performance will increase if they are exposed to laboratory activities, according to the research. According to the findings, schools should strive to establish well-equipped library laboratories, and children should be exposed to laboratory activities regularly. More importantly, schools' laboratories should be open and accessible to both teachers and pupils'.

A study on Children's Opinion Poll (GOB, 2013) shows that open play spaces were demanded by children. Building playgrounds/parks (37%), and gymnasiums (26%) in the community received the highest importance to children who took part in the online survey. But, the shrinking of open space is continuing as people are capturing those and building infrastructure for different purposes, which is the dire reality of the country nowadays—especially in the urban areas. School playgrounds in the project area put a positive impact on children's learning and development, in particular, school readiness of preschool children, the attendance rate of primary school, decreasing dropout, etc. which was found as evidenced in schools' enrollment, observation of teacher, guardians, community people and others. Its impacts on children's physical and mental health affecting learning were found as observed evidence in pupils' happiness, positive remarks, and finally in school results. Increased attendance rate According to the statements of the head teachers of the government primary schools, there is significant and inspiring evidence that the initiative helped increase the attendance rate in their schools. The attendance rate increased by more than 10% after initiating this intervention.

The school playground is an important facility for children to play every day on their initiative. It puts enormous positive impacts on children's development and learning. This initiative provides pupils' with the leisure facilities to make primary education livelier and student-friendly. Based on this backdrop, the study sought the management of school facilities and student's academic performance in Government primary schools in Kaduna South Local Government Area of Niger State, Nigeria

Statement of the Problem

The issue of student academic performance of pupils' has been a thing of concern to all and sundry in the academic environment. This is because of the dwindling performance of the government considering the relevance in the educational sector. It has been a serious problem as pupils keep performing below standard in the subject. Parents have blamed the teachers for this continuous failure, and teachers have also blamed the government for not giving urgent attention to the educational sector. This poor performance has greatly affected the quality of our graduates as most of them cannot outclass their counterparts in other schools.

Purpose of the Study

The main purpose of this study was to examine the influence of the management of school facilities and pupils' academic performance in Government primary schools in Kaduna South Local Government Area of Niger State, Nigeria. In specific terms, the study was undertaken to:

- i. To find the influence of library facilities on pupils' academic performance in Government.
- ii. To find out laboratory facilities on pupils' academic performance in Government.
- iii. To examine the influence of playgrounds and pupils' academic performance in Government.

Research Questions

These research questions were raised to guide the study.

- i. What is the influence of library facilities and pupils' academic performance in Government?
- ii. To what extent do laboratory facilities influence pupils' academic performance in Government?
- iii. What is the influence of play-ground and pupils' academic performance in Government?

Statement hypotheses

The following hypotheses were formulated for the study:

- i. There is no significant influence of library facilities on pupils' academic performance in Government.

- ii. There is no significant influence of laboratory facilities on pupils' academic performance in Government.
- iii. Play-ground has a significant influence on pupils' academic performance in Government.

METHODS AND PROCEDURE

The research design adopted for this study is an ex-post facto research design. An ex-post facto research design is a design in which groups with qualities that already exist are compared against the dependent variable. This design will be adopted because the independent variables (laboratories, libraries, and playground) have already occurred naturally. The researcher does not have control over these variables since they cannot be manipulated. Again, the ex-post facto research design is ideal for this study because the researcher can't manipulate classroom furniture, school laboratories, school libraries, and classroom sitting arrangement. They have already occurred in the population. The population of the study was all primary school pupils in public in Kaduna South Local Government Area of Niger State, Nigeria. The sampling techniques adopted for this study were stratified and simple random sampling and the sample of 181 respondents (13%) of the population of pupils' in the study area was employed. The instrument used for data collection in this study was developed by research titled "School Facilities and Pupils' academic performance in Questionnaire (SFSAPQ)" The instrument has three sections; Section A comprised demographic data such as the name of the school, gender, and school location of respondents. Section B comprised structured questions on classroom furniture, school laboratory, and school library comprising six items each which amounted to 18 items on a four-point modified Likert scale ranging from Highly Effective, (HE), Effective (E), Ineffective (IE); Highly Ineffective (HIE). Section C of the instrument comprised 18 items on the Government performance test. To ensure that the instrument designed by the researcher measures what it is designed to measure, the instrument was subjected to scrutiny by two experts in measurement and evaluation. The experts were to assess the clarity of language, the suitability of items, the content of the items, and the appropriateness of the items. The reliability of the instrument was established using the Cronbach Alpha reliability method. To determine if the consistency of the instrument. The instrument was administered to 40 respondents in the population who respondents in the final study. To do this, the researcher administered the instrument once and the co-efficient of internal consistency was determined with a coefficient of 0.67 to 0.75 which shows that the instrument was reliable for data collection. The methods of data analysis depended on each hypothesis. The hypotheses were re-stated and the variables in them were identified. The statistical analysis technique for testing was also stated.

RESULTS AND DISCUSSIONS

The results of the data analysis were presented using descriptive statistics (mean and standard deviation) to answer the research questions and inferential statistics (one-way ANOVA) was used to test the state's null hypothesis formulated for the study. The presentation of the data is shown below.

Hypothesis one

Library facilities do not significantly relate to academic performance in Government. The major independent variable in this hypothesis is library facilities, categorized in terms of highly available, moderately available and not available, while the dependent variable is academic performance in Government. To test this hypothesis, a One-way Analysis of Variance was employed with library facilities as a factor and academic performance in Government. The choice for using Analysis of Variance was based on the fact that the independent variable has more than two categories measured on a dependent variable that is continuously measured. The result of the analysis is presented in Table 1.

Table 1
One-way ANOVA of the influence of library facilities and academic performance in Government

Library facility	n	Mean	Std. D	Std. Error	
Large	116	25.0431	7.78336	.72267	
Moderate	137	22.7956	7.49621	.64044	
Small	118	21.3559	7.76418	.71475	
Total	371	23.0404	7.79300	.40459	
Sources of variance	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	808.281	2	404.140	6.866	.001
Within Groups	21662.113	168	58.864		
Total	22470.394	170			

*p< .05

Table 1 presents the One-way ANOVA of the influence of school library facilities and academic performance in Government. The p-value was found to be .001 which is less than the chosen alpha of .05. Therefore, the null hypothesis which states is not retained ($p \leq .05$). This implies that library facilities have a significant relation to academic performance in Government. **Hypothesis two** There is no significant influence on laboratory facilities and pupils' academic performance in Government. The major independent variable in this hypothesis is laboratory facilities categorized in terms of highly moderately and low while the dependent variable is academic performance in Government. One-way Analysis of Variance was employed with laboratory facilities as a factor and academic performance in Government as the dependent variable. The choice for using Analysis of Variance was based on the fact that the independent variable has more than two categories measured on a dependent variable that is continuously measured. The result of the analysis is presented in Table 2.

Table 2
One-way ANOVA of the influence of laboratories facilities and academic performance in Government

Library facilities	n	Mean	Std. D	Std. Error	
Large	111	24.7568	7.78135	.73857	
Moderate	143	23.0280	7.59720	.63531	
Small	117	21.4274	7.75855	.71728	
Total	371	23.0404	7.79300	.40459	
Sources of variance	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	631.441	2	315.720	5.320	.005
Within Groups	21838.953	168	59.345		
Total	22470.394	170			

*p< .05

Table 2 presents the One-way ANOVA of there is no significant influence of laboratory facilities on pupils' academic performance in Government. The p-value was found to be .005 which is less than the chosen alpha of .05. Therefore, the null hypothesis which states is not retained ($p \leq .05$). This implies that there is a significant influence on laboratory facilities and pupils' academic performance in Government.

Hypothesis three

Playground does not significantly influence pupils’ academic performance in government. The major independent variable in this hypothesis is a playground, categorized in terms of high, moderate and low, while the dependent variable is academic performance in Government. To test this hypothesis, One-way Analysis of Variance was employed with playgrounds as a factor and the dependent variable is academic performance in Government. The choice for using Analysis of Variance was based on the fact that the independent variable has more than two categories measured on a dependent variable that is continuously (quantitatively) measured. The result of the analysis is presented in Table 3.

Table 3

One-way ANOVA of the influence of playground and pupils’ academic performance in Government

Library facilities	n	Mean	Std. D	Std. Error	
Large	151	21.663	5.0936	.48594	
Moderate	110	20.009	5.9090	.59176	
Small	110	22.332	6.0833	.56777	
Total	371	24.136	5.2647	.50235	
Sources of variance playground	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	649.602	2	324.801	5.478	.001
Within Groups	21820.792	168	59.296		
Total	22470.394	170			

*p< .05

Table 3 presents the One-way ANOVA of the influence of playgrounds on pupils’ academic performance in Government. The p-value was found to be .001 was less than the chosen alpha of .05. Therefore, the null hypothesis is rejected ($p \leq .05$). This implies that Playground does significantly influence pupils’ academic performance in Business studies.

Discussions of findings

The findings of this study were discussed based on the stated hypotheses as shown below

Library Facilities on Pupils’ academic performance

The results of the findings revealed that there is a significant influence of library facilities on pupils’ academic performance in Government s. Library remains an important part of the school system and that school without a library cannot be recognized as a good school. Also, the researchers were of the view that more studies on the present finding agree with the study of Goodall and Pattern (2011) e findings of the study showed a positive relationship between the use of the library and academic achievement. They found that reasonable provision of library services was a predictor of pupils’ academic achievement. They observed that pupils’ often made use of library materials, which enhanced their studies in school. Also in agreement with the present study is that Lance and Hofschire (2012) researchers found that in some schools, where they had provided library services, it increased the reading habits of their pupils’, thus making a positive effect on student’s academic achievement, in comparison to schools where they had no library staffing and where a negative relationship on pupils’ academic performance was seen. In the same vein, Stone and Ramsden (2013) found that pupils’ who accessed the library data for their academic activities had a positive significant relationship with their academic achievement.

Laboratory Facilities on Pupils’ academic performance

It was found that there is a significant influence of laboratory facilities on pupils’ academic performance in Government. The results may be in this direction in that laboratory provide pupils’ with various opportunities to learn and experiment, which plays a crucial role in the ongoing intellectual development of pupils’ at any academic level. Science labs give pupils’ the time, space,

and resources to explore and experiment. The finding is in harmony with the study of Elechi and Eya (2015) results showed that most junior primary schools do not have the laboratory equipment and materials needed for teaching Government and there were no existing Government laboratories. It was also found that most Government teachers do not utilize even the few available facilities for teaching. Some of the teachers' reasons for not using the equipment and materials include a lack of adequate laboratory facilities and a lack of teachers' guides and practical manuals. Also in consonance with the present finding is that Omiko (2015) confirmed a significant difference in the performance of pupils'. Similarly, Adigun, Onihunwa, Irunokhai, Sada, and Adesina (2015) finding show though the male pupils' had slightly better performance compared to the female pupils', it was not significant. In harmony with the present study, Oguma's (2018) findings revealed that the availability of laboratories in primary schools is relatively high, however, most are not appropriately equipped, based on the replies gathered and analyzed. Furthermore, the findings revealed that pupils' are regularly exposed to laboratory activities in schools.

Playground and Pupils' academic performance

It was revealed that playground has a significant influence on pupils' academic performance in Government. The finding agrees with Children's Opinion Poll (2013) shows that open play spaces were demanded by children. Building playgrounds/parks (37%), and gymnasiums (26%) in the community received the highest importance to children who took part in the online survey. In light of this, the school playground is an important facility for children to play every day on their initiative. It puts enormous positive impacts on children's development and learning. This initiative provides pupils' with the leisure facilities to make primary education livelier and student-friendly.

Conclusion

Based on the results and findings of the research work, the following conclusions are drawn. That the availability of educational facilities in the teaching and learning process is very important and has numerous advantages in student rate of retention and assimilation thereby enhancing pupils' academic achievement. Enough educational facilities are not provided for teaching and learning in the study area. From the foregoing, one can infer that what makes a lesson easy to understand and a teacher resourceful are the types of educational facilities used during a lesson and how well they are used. In conclusion, the finding showed that

1. There is a significant influence of library facilities on pupils' academic performance in Government.
2. There is a significant influence of laboratory facilities on pupils' academic performance in Government.
3. Play-ground has a significant influence on pupils' academic performance in Government.

Recommendations

Based on the result that the majority of schools do not have educational facilities it is recommended that the government should:

1. The government should provide effective and efficient library facilities to enhance teachers teaching and student performance.
2. Schools in collaboration with the government should equip schools' laboratories for effective practical exercises.
3. Recreational facilities and health care service delivery should be provided to enhance student academic achievement.

Implication for Stakeholders of higher education in Nigeria

This study may have some implications for the following stakeholder in the education

1. It is hoped that pupils' may benefit from this study because they would be able to have proper insight and understanding that the non-provision of infrastructure in primary schools will adversely affect their academic performance.
2. Teachers, it is hoped, would, through the study come to terms with the fact that the provision of adequate infrastructure will help both pupils' and teachers to facilitate the teaching and learning processes.
3. The school authorities would utilize this study's findings and recommendations to find a solution to the inadequate provision of infrastructure in our primary schools. Through this study, they would better understand the effect of inadequate provision of infrastructure in our schools, on the teachers' work performance and pupils' academic performance.
4. It would be of benefit to parents because it will enable them to understand the effect of inadequate infrastructure on the academic and work performance of both pupils' and teachers. With the finding and recommendations of this study, parents would help the school authorities to find lasting solutions to the problem of inadequate provision of infrastructure in our schools.

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