

IMPACT OF FACILITIES PROVISION ON ACADEMIC PERFORMANCE OF PUBLIC SECONDARY SCHOOL STUDENTS IN KATSINA-ALA LOCAL GOVERNMENT OF BENUE STATE

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Abstract

This study examined the facilities provided on academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State, Nigeria. Three research questions guided the study and three hypotheses were tested. Descriptive survey research design was adopted for the study. The population of the study comprised 2,510 teachers from public secondary schools in the Local Government Area of the State. A sample of 350 teachers was drawn for the study using multi-stage sampling procedure. A 35-item structured four-point scale questionnaire titled "Impact of Facilities Provision Questionnaire (IFPQ)" was used for data collection. The instrument was validated by three experts, two in Educational Management and one in Test and Measurement who ascertained the validity of the instrument after corrections. The reliability of the instrument was ascertained through a pilot study which yielded a Cronbach Alpha correlation co-efficient of 0.76 which was considered high enough and reliable to use for the study. Mean and standard deviation were used to answer the research questions, while chi-square was used to test the null hypotheses at 0.05 level of significance. The findings indicated that there is significant impact in the provision of libraries, electricity supply and portable water supply in public secondary schools in Katsina-Ala Local Government Area of Benue State. Based on the findings, it was recommended among others, that government should endeavour to provide adequate school facilities to meet up students' enrolment and balance the disparity in the provision of school facilities in different secondary schools.

Keywords: Public schools, school facilities, academic performance water supply, electricity supply, libraries.

Introduction

A school is a formal organization where learners are fostered with desirable and relevant changes in behaviour and attitude so as to become useful and functional in the society. Ochai (2012) posits that a school is a designated environment whose primary purpose of teaching and learning is to bring about, in the learner, desirable change in behaviour through critical thinking. Schools are established for the purpose of teaching and learning. It is also very important that the teachers and students are properly accommodated to facilitate the teaching and learning that go on in schools. This is the essence of the educational facilities provision (Aye, 2015). Therefore, school facilities are the space interpretation and physical expression of the school curriculum (Alini, Ehinola, & Alabi, 2011).

The issue of facilities provision in secondary schools seemed to be a problem globally. According to Karim, Lodhi and Usman (2011), government does not seem to provide secondary school facilities like transportation, laboratories, and libraries. Laboratories are essential at secondary school level especially for science students, but the teachers do teach students with limited and improper damaged instruments. Ajayi (2017) submitted that high levels of students' academic performance may not be guaranteed where instructional space such as classroom, libraries, technical workshops and laboratories are structurally defective.

In Benue State and Katsina-Ala Local Government Area in particular, secondary schools are expected to function in compliance with the achievement of the national education objectives. According to Benue State Government Guidelines (2015) on the establishment of secondary schools, every school is expected to have school facilities to the prescribed quality and quantity to accommodate students to perform brilliantly in their examinations generally, and it can determine the quality of output of secondary schools. Facilities provision is one of the parameters used to measure the effectiveness of the school system. The better the performance of students, the more effective the system is assumed to be (Philius & Wanjobi, 2011).

Secondary school facilities can be a vehicle for effective teaching and learning and a great comfort for teachers and students. If poorly provided the school cannot derive maximum benefits from them. Therefore, inadequate provision of school facilities in any of the secondary schools presumably cannot go down well with the teachers as well as the students. Asiabaka (2011) defines school facilities as the material resources provided for teachers and students to optimize their productivity in the teaching and learning process. The realization that the transfer of knowledge does not only take place in the four walls of the classroom from the teachers to the students but rather that learning takes place through internal and external environment has necessitated the creative and innovative development of teaching and learning facilities that reflect these changes (Ochai, 2012).

According to Akpakwu (2012), a well planned curriculum will fail if it is not supported with adequate facilities and well trained teachers who have skills to improvise when they do not have enough instructional facilities to work within the secondary schools. The school must ensure that there is adequate provision of school facilities. There are numerous school facilities which the school should use but for the purpose of this study, a few of them are explained.

The school library is the academic life wire of the school. It is the centre of intellectual activities for both the teachers and the students. Akpakwu (2012), states that a well equipped library is a store house of knowledge and a centre of learning activities for students and teachers. Akpakwu adds that if the school library is properly organized and used, it encourages students' interests in reading and learning, research and professional development. Effective teaching and learning can only take place in a school that has a well stocked library.

Equally important is portable water supply: There is a saying that water is life. It therefore means that without water the school and its environment will not be comfortable. Aremu (2012) observes that water is very important to the school environment. All the human resources that are managing the school need water and the school environment needs water to be kept clean. The importance of water cannot be overemphasized as stated by Adam (2019). The United Nations General Assembly Report of August 3, 2010 noted that, Nigeria was among the 122 countries that entered into the resolution adopted by the United Nations General Assembly, pledging to make water and sanitation a human rights for their citizens'.

Many scholars, researchers, administrators and educational planners are of the opinion that school facilities in Nigerian secondary schools are inadequate and a few available ones are being over utilized due to the astronomical increase in school enrolment (Ikoya & Oneyase, 2018). Adeogu (2018), noted that the inadequacy of secondary school facilities and lack of maintenance for available ones were major problems facing Nigerian educational system, the school facilities are grossly inadequate to match the students' population and the available facilities are poorly maintained. The availability and maintenance of school facilities may enhance teaching and learning and may improve academic performance of students. Ajayi (2012) identified the importance of educational facilities in teaching and learning, stating that inadequacy, deterioration and lack of maintenance of these facilities may spell doom for the teachers and students in the teaching and learning activities. When school facilities are not well maintained they may constitute health hazard to the teachers and students. They may fall on their heads when engaged in an activity in the classroom, library or laboratory.

Government has as its primary objectives, the provision of sound education for the learners. However, there is every need for secondary schools to make available all the teaching and learning facilities to ensure the proper education of the students. Udoh and Akpa (2010) affirm that, the introduction of Universal Basic Education(UBE)has led to the increase in school enrolment without a correspondent increase in the school facilities provision in public secondary schools. This brought about the need by the government to build more schools with adequate facilities to accommodate the high population of students. Ali, Aliyu and Olanrewaju (2013) discovered that, non-provision of these facilities in public secondary schools has called for some parents to transfer their children/wards to private secondary schools where they have accommodation and access to learning facilities. This situation seems applicable in the study area.

It is against this background that this study aimed at examining the impact of school facilities on the academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State.

Statement of the Problem

The usefulness of adequate facilities provision in the secondary schools cannot be overemphasized especially as it relates to teaching and learning process. It is the responsibility of the owners of these individual schools to provide these facilities. However, there is public outcry by the stakeholders in education about the falling standard of education in Nigeria generally and Benue State in particular. This is because most of the public secondary schools seemed to have either substandard, inadequate facilities or complete absence of school facilities for effective teaching and learning.

The quantity and quality of teaching and learning facilities should be adequate for all the secondary schools as provided in the standard of Ministry of Education guiding the establishment of these schools. Following this scenario, the researcher deemed it necessary to examine the impact of school facilities on academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State.

Purpose of the Study

The purpose of this study is to examine the impact of school facilities on academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State. Specifically, the study sought to:

- i. Examine the impact of library facilities on the academic performance of public secondary school students in Katsina-Ala Local Government Area.
- ii. Determine the impact of electricity supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area.
- iii. Examine the impact of portable water supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area.

Research Questions

The study was guided by the following research questions.

- i. What is the impact of library facilities on the academic performance of public secondary school students in Katsina-Ala Local Government Area?
- ii. What is the impact of electricity supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area?
- iii. What is the impact of portable water supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area?

Hypotheses

The following Hypotheses were tested at 0.05 alpha level of significance.

- i. There is no significant impact of library facilities on the academic performance of public school students in Katsina-Ala Local Government Area.
- ii. There is no significant impact of electricity supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area.
- iii. There is no significant impact of portable water supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area.

Research Method

A descriptive survey research design which sought the opinions of the respondents was adopted for the study. A descriptive survey research design means studies in which the

subjects or variables are observed in their natural or original setting. The area of the study was Katsina-Ala Local Government Area of Benue State. The population of the study comprised 2,510 public secondary school teachers in the Local Government Area of the state. A sample of 300 teachers was selected for the study. This sample is considered appropriate for an approximate population of 2,510 according to Glenn (2012) formula for determining sample size from a given population. A multi-stage sampling procedure which involves proportionate stratified, purposive and simple random sampling techniques was used to determine the sample size for the study. The first stage involved the use of proportionate stratified sampling technique where the population was divided into strata proportionally to the council wards in the Local Government Area. The second stage involved the use of purposive sampling technique where three schools were sampled from each Local Government Area. Lastly simple random sampling technique which gives every teacher an equal opportunity to be included in the study was applied to get the sample size. The instrument for data collection was a 4-point rating scale titled: "Impact of Facilities Provision Questionnaire (IFPQ)" which was developed by the researchers. The instrument was subjected to face and content validation by three experts; one in Test and Measurement and two in Educational Management. The reliability of the instrument was established and it yielded the reliability of 0.76 which was judged to be adequate according to Fraenkel and Wallen (1993). The data collected were subjected to descriptive and inferential statistics. Mean and standard deviations were used to answer the research questions while chi-square statistics was employed to test all the null hypotheses at 0.05 level of significance.

Results

The results of the study are presented according to the research questions and research hypotheses.

Research Question 1: What is the impact of library facilities on the academic performance of public secondary school students in Katsina-Ala Local Government Area?

Table 1: Mean and Standard Deviation of Respondents on the impact of Library Facilities on the Academic Performance of Public Secondary School students in Katsina-Ala Local Government Area of Benue State

S/NO	Item Description	\bar{x}	SD	Decision
1.	There are adequate furniture in the library for students in my school	2.61	1.81	Agree
2.	My school has adequate sizeable libraries for students/teachers' usage	2.76	1.11	Agree
3.	My school provides non-books media in the school library such as audio player/cassettes	2.94	1.83	Agree
4.	There are inadequate current/standard books in my school library	2.84	0.99	Agree
5.	There is adequate provision for ceiling fans in my school library	2.51	1.16	Agree
	Cluster Mean/SD	2.73	1.38	Agree

Benchmark: Mean \geq 2.50 = Agree; Mean $<$ 2.50 = Disagree

Table 1 shows the mean and standard deviation of respondents on the impact of library facilities on the academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State. It indicates high mean ratings of all the items which are above the acceptable benchmark of 2.50. The cluster mean of 2.73 with standard deviation of 1.38 is above the benchmark of 2.50. This implies that library facilities have impact on academic performance of secondary school students in Katsina-Ala Local Government Area of Benue State.

Research Question 2: What is the impact of electricity supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area?

Table 2: Mean and Standard Deviation of Respondents on the impact of Electricity Supply on Academic Performance of Public Secondary School students in Katsina-Ala Local Government Area of Benue State

S/NO	Item Description	\bar{x}	SD	Decision
1.	Our school has electricity supply which extends to all classroom	2.88	0.96	Agree
2.	Our school has electricity supply in the school laboratory	2.55	1.13	Agree
3.	Our school has electricity supply in the school library	2.55	1.13	Agree
4.	Our school has electricity supply in the school staff quarters	2.61	1.17	Agree
5.	Our school has electricity supply in the dining hall	2.89	1.05	Agree
	Cluster Mean/SD	2.69	1.09	Agree

Benchmark: Mean \geq 2.50 = Agree; Mean $<$ 2.50 = Disagree

Table 2 shows the mean and standard deviation of respondents on the impact of electricity supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State. It indicates high mean ratings of all the items which are above the acceptable anchor point of 2.50. The cluster mean of 2.69 with standard deviation of 1.09 is above the anchor point of 2.50. This implies that electricity supply has impact of on academic performance of secondary school students in Katsina-Ala Local Government Area of Benue State.

Research Question 3: What is the impact of portable water supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area?

Table 3: Mean and Standard Deviation of Respondents on the Impact of Portable Water Supply on Academic Performance of Public Secondary School Students in Katsina-Ala Local Government Area of Benue State

S/NO	Item Description	\bar{x}	SD	Decision
1.	My school has no water supply in the toilet facilities	2.76	1.14	Agree
2.	My school has portable water supply in the dormitories for students	2.72	1.10	Agree
3.	My school does not provide a well as source of water supply for students and staff quarters for teachers' use	2.88	1.02	Agree
4.	My school has water supply in the dining hall and all over the school environment	3.07	0.98	Agree
5.	My school provides well as source of water supply for students and staff	2.84	0.96	Agree
Cluster Mean/SD		2.85	1.04	Agree

Benchmark: Mean \geq 2.50 = Agree; Mean $<$ 2.50 = Disagree

Table 3 shows the mean and standard deviation of respondents on the impact of portable water supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State. It indicates high mean ratings of all the items which are above the acceptable anchor point of 2.50. The cluster mean of 2.85 with standard deviation of 1.04 is above the anchor point of 2.50. This implies that portable water supply has impact of on academic performance of secondary school students in Katsina-Ala Local Government Area of Benue State.

Hypothesis 1: There is no significant impact of library facilities on the academic performance of public school students in Katsina-Ala Local Government Area.

Table 4: Chi-square (χ^2) Analysis of Impact of Library Facilities on Academic Performance of Public School Students in Katsina-Ala Local Government Area

	Df	X^2_{cal}	X^2_{tal}	Asymp. Sig.(2-sided)	Decision
Chi-square	12	3.789	3.84	.000	Rejected
Likelihood	12			.000	
No of Valid Cases		350			

$$\chi^2_{cal} = 3.789, \chi^2_{tab} = 3.84, df = 12, \alpha = 0.05$$

Table 4 as presented shows the impact of provision of library facilities on academic performance of public secondary schools students in Katsina-Ala Local Government Area of

Benue State. The result in Table 4 shows that $\chi^2_{cal} = 3.789$ and $X^2_{tab} = 7.82$ at $df = 12$, P-Value = 0.000. The table reveals a significant value (P-value) of 0.000. Since $P < .05$, the null hypothesis which states that there is no significant impact of library facilities on academic achievement of public secondary school students in Katsina-Ala Local Government Area is therefore rejected. This implies that library facilities have impact on academic performance of public secondary school students in Katsina-Ala Local Government Area.

Hypothesis 2: There is no significant impact of electricity supply on the academic performance of public secondary school students in Katsina-Ala Local Government Area.

Table 5: Chi-square (\times^2) Analysis of Impact of Electricity Supply on Academic Performance of Public School Stusents in Katsina-Ala Local Government Area

	Df	X^2_{cal}	X^2_{tal}	Asymp. Sig.(2-sided)	Decision
Chi-square	12	11.282	3.84	.001	Rejected
Likelihood	12			.001	
No of Valid Cases		350			

$\times^2_{cal} = 11.282, \times^2_{tab} = 3.84, df = 12, \alpha = 0.05$

Table 5 as presented shows the impact of electricity supply on academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State. The result in Table 5 shows that $\chi^2_{cal} = 11.282$ and $X^2_{tab} = 7.82$ at $df = 12$, P-Value = 0.001. The table reveals a significant value (P-value) of 0.001. Since $P < .05$, the null hypothesis which states that there is no significant impact of electricity supply on academic performance of public secondary school students in Katsina-Ala Local Government Area is therefore rejected. This implies that electricity supply has impact on academic performance of public secondary school students in Katsina-Ala Local Government Area.

Hypothesis 3: There is no significant impact of portable water on the academic performance of public secondary school students in Katsina-Ala Local Government Area.

Table 6: Chi-square (\times^2) Analysis of Impact of the Provision of Portable Water on Public Schools in Katsina-Ala Local Government Area

Chi-square	12	70.281	3.84	.012	Rejected
Likelihood	12			.012	
No of Valid Cases		350			

$\times^2_{cal} = 70.281, \times^2_{tab} = 3.84, df = 12, \alpha = 0.05$

Table 6 as presented shows the impact of portable water on academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State. The result in Table 6 shows that $\chi^2_{\text{cal}} = 70.281$ and $X^2_{\text{tab}} = 3.84$ at $df = 12$, P-Value = 0.012. The table reveals a significant value (P-value) of 0.012. Since $P < .05$, the null hypothesis which states that there is no significant impact of portable water on academic performance public secondary school students in Katsina-Ala Local Government Area is therefore rejected. This implies that portable water has impact on academic performance of public secondary school students in Katsina-Ala Local Government Area.

Discussion of Findings

The discussion of the findings of this study is based on the three research questions and hypotheses raised for the study.

The first finding of the study revealed that there is significant impact of library facilities on academic performance of public secondary school students. The finding is in line with Eze (2010) who found that desks, current books and presence of library assistants constituted the areas of influence to the academic achievement of students with regard to library services in the public secondary schools. This finding therefore contradicts that of Keith (2018) who reported that public secondary schools in Nigeria lacked adequate library facilities. Keith maintained that most of the public secondary schools had the library buildings but at most what was contained therein was just a handful of obsolete textbooks. Many libraries in the public schools did not have library resources like, units booklets, library materials, reference materials, newspapers, pamphlets, periodicals, audio-visual or non-reading materials and so on.

The second finding of the study indicated that there is significant impact of electricity supply on academic performance of public secondary school students. This finding is in consonance with Alimi, Ehinola and Alabi (2012) who found a significant impact of facilities available on public secondary schools in Ondo State. This implies that if there is constant electricity supply in the school environment, the students will use the light for reading, doing their assignments and other things that one can use electricity for.

The third finding of the study revealed that there is significant impact of the provision of portable water on academic performance of public secondary school students. This finding is in line with the finding, Odeleye, Oyelami and Odeleye (2012) who posited that public secondary schools in some parts of southern Nigeria have adequate portable water supply which ease students' work of looking for water here and there as against facing their academic activities. According to Odeleye et al, some public secondary schools had boreholes in the school for the use of all and sundry. Some schools had dug well which all the students and sometimes some staff and some members of the community where the schools are located also make use of them.

Conclusion

Based on the findings of this study, it was concluded that there is significant impact of library facilities, electricity supply and portable water supply on academic performance of public secondary school students in Katsina-Ala Local Government Area of Benue State.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. School management of public secondary schools should take provision of school library facilities as their top priority as it is the store house of knowledge of any school and helps immensely in facilitating teaching and learning.
2. Provision of electricity is a very huge project that demands government attention because of the finance involved. This therefore means that, school principals should liaise with government in helping them provide this type of facilities especially in schools around the rural areas.
3. School administrators should work hard to improve on their internal revenue generation so as to cater for themselves in the provision of portable water supply which could be through digging of boreholes in their respective schools to complement government efforts.

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