INFLUENCE OF INFRASTRUCTURAL FACILITIES ON THE MANAGEMENT OF SECONDARY SCHOOLS IN BENUE STATE, NIGERIA

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Abstract
This study investigated the influence of infrastructural facilities on the management of public secondary schools in Benue State. Two research questions and two hypotheses guided the study. Descriptive survey research design was adopted for the study. The population of the study comprised 5,110 teachers from 297 public secondary schools in Benue State. Four hundred teachers from 30 public secondary schools constituted the sample of the study. A 10 item structured questionnaire constructed by the researcher titled Infrastructural Facilities Questionnaire (IFQ) was used for collection of data for the study. A pilot study was conducted to establish the reliability of the instrument which yielded 0.82. Data collected were analyzed using descriptive statistics of mean and standard deviation to answer research questions while the chi-square $\chi^2$ test of goodness of fit were used to test the hypotheses at 0.05 level of significance. The findings revealed that school libraries and school laboratories significantly influenced the management of public secondary schools in Benue State. Based on the findings of the study, it was recommended among other things that school administrators should ensure that school library is built and well equipped with books to enhance effective teaching and learning in the school.

Key Words: Infrastructural facilities, management, school libraries, school laboratories

Introduction
Schools are established for the purpose of transmitting what is worthwhile into the learning through a medium known as teaching. This explains the fact that it is expedient to make sure that the teachers and learners are properly accommodated to facilitate effective teaching and learning in the school. This is the essence of the school infrastructural facilities. Therefore school infrastructural facilities are the space interpretation and physical expression of the school curriculum (Alimi 2004).
In the opinions of Uko (2001), schools that have adequate infrastructural facilities do great work because of the influence it have on the teaching and learning. Ereahwo (1999) posits that for a teacher to equip students with good education as well as impact positive knowledge in them, he/she requires proper infrastructure. This is clear that the school infrastructural facilities seem not only to ease the work of teaching but also enable the students understand better. According to Dejong (1997) school infrastructural facilities influence the teaching and learning process and are central concern of educational planners.

Infrastructural facilities are the physical facilities used to facilitate teaching and learning in schools. They include school buildings, classrooms, assembly hall, laboratories, libraries, students’ hostels, staff quarters, health centres and sports facilities (Idoko, 2005). The infrastructural facilities give educational institutions their appropriate shape and atmosphere for teaching and learning. These facilities and the environment portray the quality of the institutions in terms of their staff and students’ friendliness, attraction to outsiders, aesthetics, healthy, safety, currency and relevance (Okorie and Uche, 2004).

The infrastructural development in secondary schools involves provision of buildings, classrooms, hostels, staff quarters, workshops, laboratories, Information Communication Technology centres, libraries, health centres and sports facilities. They contribute greatly in influencing effective teaching and learning (Sallies, 2002).

In the opinions of Asemah (2010), good school facilities like library and laboratories generally provide a conducive/healthy enabling environment for students’ learning process. The level of students’ concentration gets high which paves way for a more effective teaching and learning process as well as serve as a motivating factor or force for teaching and learning. Asemah further states that school infrastructural facilities serve as an aid to better understanding
on the part of the students as well as help the teachers to communicate better, a suitable relaxation centre that eases tension on the part of both the staff and students hence encourage academic performance and help the students in developing their mental alertness which largely enhance academic performance.

Commenting on the issue of school library, Daniel (2004) observes that the library remains the power house of educational institutions and that an education institution without a library is like a motor car without an engine and a body without a soul. Similar in line with the finding, Smith (2002) opines that the school library is the backbone of functional education without which academic excellence cannot be achieved. Obviously speaking, both the library and the school are inseparable firms that one ceases to function well without the other. On the other hand, Hofstein and Lunetta (2004) posit that the school laboratory offers opportunities for productive, cooperative interaction among students and with the teacher that have the potential to promote an especially positive environment. The school learning environment and the management depends markedly on the nature of the school activities conducted in the laboratory. Similar in agreement with the finding, Eniaiyetu in Kafiya (2006) observe that school laboratory is very important in the teaching and learning of science. It makes it easier for management to expose the child to alternative instructions and practical as well as learning through improvisation. Several studies such as Mpho (2013) and Onifade (2004) have shown that a close relationship exists between the infrastructural facilities and the academic performance of students.

Ogunsaju (2000) maintains that the quality of education that children receive bears direct relevance to the availability or lack thereof of infrastructural facilities and over-all atmosphere in which learning takes place. Ogunsaju further states that infrastructural facilities consist of all types of buildings for academic activities and non-academic activities, equipment for academic and non-academic activities, areas for sports and games, landscape, farms and gardens including trees, roads and paths. Others include furniture and toilet facilities, lighting, acoustics, storage
facilities and packing slot, security, transportation, Information Communication Technology, cleaning materials, food services, and special facilities for the physically challenged persons.

These facilities play pivotal role in the management of every level of education particularly secondary schools in Benue State mostly in helping to actualize educational goals and objectives by satisfying the physical and emotional needs of the staff and students of the school. However, the problem of overcrowding and inadequate funding has always been pointed out as factors responsible for decline in quality of education in Nigeria (Olagbeniro, 2010). More to that is the breakdown and deterioration of facilities, shortage of new books, current journals in libraries, supply of laboratory equipment and learning facilities, the infrastructure and facilities remain inadequate to cope with a system that is growing at rapid place. This tends to create a lot of difficulty in effective management of educational institutions. Secondary schools in Benue State are not an exception of this situation.

Management according to Adepiju (2008) is the utilization of physical and human resources through cooperative efforts and it is the utilization of physical and human resources through cooperative efforts and it is accomplished by performing the function of planning, organizing, staffing, directing and controlling. School management is the process of deciding what to do in school and getting it done through effective use of available resources (Cotton, 2003. Olaniyan (2000) sees school management as the process demanding the management of specific school functions. It is the control and making of decisions in school. This is because, school infrastructural facilities form the basis upon which it is easier to run administrative and academic issues of the school. It is based on this premise that the researcher is deemed it necessary to carry out this study on the influence of infrastructural facilities on the management
of secondary schools in Benue State with particular focus on school libraries and school laboratories.

**Statement of the Problem**

In recent times, poor management schools particularly secondary schools in Benue State have been an issue of concern to education stakeholders. Some concerned individuals have expressed worry over the manner in which secondary schools are been ineffectively and inefficiently run. Such issue of poor administration does not seem to affect only the achievement of school objective but the image of the school. Stakeholders are also worried about the issue of infrastructural facilities provisions in schools especially the provision of school library and laboratories which are very essential in the management of schools. The question that rightly comes in mind is that, what could be responsible for this ineffective and inefficient management of schools in the study area? Could it be attributed to inadequate provision of infrastructural facilities? This study is set out to investigate the situation in the study area especially where school administrators are been largely accused of poor management of schools. The problem of this study stated in a question form is: what is the influence of infrastructural facilities on the management of public secondary schools in Benue State, Nigeria.

**Purpose of the Study**

The main purpose of this study is to investigate the influence of infrastructural facilities on the management of public secondary schools in Benue State, Nigeria. Specifically, the study sought to;

1. determine the influence of school libraries on the management of secondary schools in Benue State, Nigeria.
2. ascertain the influence of school laboratories on the management of secondary schools in Benue State.
Research Questions

The study was guided by the following research questions;

1. What is the influence of school libraries on the management of secondary schools in Benue State, Nigeria?

3. What is the influence of school laboratories on the management of secondary schools in Benue State?

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance.

Ho1. School libraries have no significant influence on the management of secondary schools in Benue State, Nigeria.

Ho2. School laboratories have no significant influence on the management of secondary schools in Benue State, Nigeria.

Methodology

The study adopted a survey research design to enhance generalization of findings. This design gathers data at a particular point in time with the intention of describing the nature of the existing conditions, identifying the standards against which existing conditions can be compared and determining the relationship that exists between specific events (Orodho, 2005). The study is confined to Benue State. The population of the study comprised 110 teachers from 297 public secondary schools in Benue State. Four hundred teachers from 30 public secondary schools constituted the sample of the study. A-10 item structured questionnaire constructed by the researcher titled Infrastructural Facilities Questionnaire (IFQ) was used for data collection. The questionnaire was validated by experts in Educational Management and Tests and Measurement from the Faculty of Education, Benue State University, Makurdi. A pilot study was conducted on 20 teachers who were not part of the sample for the main study. The result of the pilot study was analyzed using Cronbach Alpha Correlation Coefficient and a reliability coefficient of 0.82 was obtained from the instrument. The data collected was analyzed using simple descriptive statistics of mean and standard deviation to answer research questions. A mean cut-off point of 2.50 was
used for decision making. Any mean score of 2.50 and above was accepted as having the desired influence while any mean score below 2.50 was rejected as not having influence. The hypotheses were tested using chi-square test of goodness of fit at 0.05 level of significance.

Results and Findings

This section presents and discussed the results of the study.

Research Question One

What is the influence of school libraries on the management of secondary schools in Benue State, Nigeria?

Table 1: Mean Ratings and Standard Deviations of the Influence of School Libraries on the Management of Secondary Schools in Benue State, Nigeria

<table>
<thead>
<tr>
<th>Item No</th>
<th>Item Description</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>X</th>
<th>STD</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A well equipped school library helps in providing information to teachers</td>
<td>213</td>
<td>169</td>
<td>10</td>
<td>8</td>
<td>2.81</td>
<td>0.81</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>for better delivery of their lessons.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Inadequate library facilities make teaching boring for teachers.</td>
<td>238</td>
<td>130</td>
<td>21</td>
<td>11</td>
<td>2.51</td>
<td>1.12</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>School excellent performance is attributed to a well equipped school library.</td>
<td>201</td>
<td>158</td>
<td>23</td>
<td>18</td>
<td>2.87</td>
<td>0.85</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>School managers consult the school library books for better managerial skills.</td>
<td>189</td>
<td>152</td>
<td>31</td>
<td>28</td>
<td>3.37</td>
<td>0.83</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>School management cannot be effective without adequate equipped school library.</td>
<td>198</td>
<td>119</td>
<td>18</td>
<td>65</td>
<td>3.09</td>
<td>1.10</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Cluster Mean/Standard Deviation 2.93 0.94 Accepted

Decision Rule: 1.00-1.49=SD, 1.50-2.49=D, 2.50-3.49=A, 3.50-4.00=SA

Data on Table 1 showed that the mean rating for items 1-5 were 2.81, 2.51, 2.87, 3.37 and 3.09 respectively with their corresponding standard deviations of 0.81, 1.12, 0.85, 0.83 and 1.10. Based on the boundary criteria for decision making, it means that all item mean scores were rated above the cut-off point of 2.50. The cluster mean of 2.93 was also found to be above the
cut-off point of 2.50. This implies that school libraries influence the management of secondary schools in Benue State, Nigeria.

**Research Question Two:**
What is the influence of school laboratories on the management of secondary schools in Benue State?

<table>
<thead>
<tr>
<th>Item No</th>
<th>Item Description</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>X</th>
<th>STD</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Teachers make better input in teaching science subjects when there are available laboratories facilities.</td>
<td>176</td>
<td>182</td>
<td>18</td>
<td>24</td>
<td>3.20</td>
<td>1.01</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Most science students fail practical examinations when the school has shortage of laboratory facilities.</td>
<td>230</td>
<td>154</td>
<td>6</td>
<td>10</td>
<td>3.20</td>
<td>0.89</td>
<td>Accepted</td>
</tr>
<tr>
<td>8</td>
<td>Students understand teaching better when they are taught practical things through laboratory.</td>
<td>200</td>
<td>186</td>
<td>5</td>
<td>9</td>
<td>3.41</td>
<td>0.64</td>
<td>Accepted</td>
</tr>
<tr>
<td>9</td>
<td>School laboratories foster better motivation among teachers in teaching achievement in science.</td>
<td>150</td>
<td>210</td>
<td>22</td>
<td>18</td>
<td>3.35</td>
<td>0.74</td>
<td>Accepted</td>
</tr>
<tr>
<td>10</td>
<td>Schools with good laboratories facilities attract more students’ enrolment.</td>
<td>171</td>
<td>214</td>
<td>7</td>
<td>8</td>
<td>3.24</td>
<td>0.85</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**Cluster Mean/Standard Deviation**

|                | 3.28 | 0.83 | Accepted |

Table 2 showed that the mean rating for items 1-5 were 3.20, 3.20, 3.41, 3.35 and 3.24 respectively with their corresponding standard deviations of 1.01, 0.89, 0.64, 0.74 and 0.85. Based on the boundary criteria for decision making, it means that all item mean scores were rated above the cut-off point of 2.50. The cluster mean of 3.28 was also found to be above the cut-off point of 2.50. This implies that school laboratories influence the management of secondary schools in Benue State.
Hypotheses Testing

Hypotheses One:

School libraries have no significant influence on the management of secondary schools in Benue State, Nigeria.

Table 3: Chi-Square test of the influence of school libraries on the management of secondary schools in Benue State, Nigeria

<table>
<thead>
<tr>
<th>Opinions</th>
<th>Observed</th>
<th>Expected</th>
<th>Residual</th>
<th>Level of Sig.</th>
<th>df</th>
<th>$\chi^2$-cal</th>
<th>P-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>66</td>
<td>100.0</td>
<td>-34.0</td>
<td>0.05</td>
<td>3</td>
<td>124.96</td>
<td>0.00</td>
<td>Sig.</td>
</tr>
<tr>
<td>D</td>
<td>26</td>
<td>100.0</td>
<td>-74.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>158</td>
<td>100.0</td>
<td>58.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>150</td>
<td>100.0</td>
<td>50.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 253.0.

Table 3 revealed that $\chi^2 = 124.96 \text{ df} = 3$ and p = 0.00. Since the p-value of 0.00 is less that the set alpha-value of 0.05, (p< 0.05) at 3 degree of freedom, the null hypothesis which states that school libraries have no significant influence on the management of secondary schools in Benue State, was therefore, not accepted. This means that school libraries have significant influence on the management of secondary schools in Benue State, Nigeria.

Hypotheses 4:

School laboratories have no significant influence on the management of secondary schools in Benue State, Nigeria.
Table 4: Chi-Square test of the influence of school laboratories on the management of secondary schools in Benue State

<table>
<thead>
<tr>
<th>Opinions</th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
<th>Level of Sig.</th>
<th>df</th>
<th>( \chi^2 \text{-cal} )</th>
<th>P-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>20</td>
<td>100.0</td>
<td>-80.0</td>
<td>0.05</td>
<td>3</td>
<td>182.48</td>
<td>0.00</td>
<td>Sig.</td>
</tr>
<tr>
<td>D</td>
<td>52</td>
<td>100.0</td>
<td>-48.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>138</td>
<td>100.0</td>
<td>38.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>190</td>
<td>100.0</td>
<td>90.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 100.0.

Table 4 revealed that \( \chi^2 = 182.48 \text{ df } = 3 \) and \( p = 0.00 \). Since the p-value of 0.00 is less that the set alpha-value of 0.05, \( p < 0.05 \) at 3 degree of freedom, the null hypothesis which states that school laboratories have no significant influence on the management of secondary schools in Benue State, was therefore, not accepted. This means that school laboratories have significant influence on the management of secondary schools in Benue State, Nigeria.

Discussion of Findings

The first finding of the study as presented on Table 3 indicates school libraries have significant influence on the management of secondary schools in Benue State, Nigeria. The result agrees with Daniel (2004) who observes that the library remains the power house of educational institutions and that an education institution without a library is like a motor car without an engine and a body without a soul. Similar in line with the finding, Smith (2002) opines that the school library is the backbone of functional education without which academic excellence cannot be achieved. Obviously speaking, both the library and the school are inseparable firms that one ceases to function well without the other.

The second finding of this study revealed that school laboratories have significant influence on the management of secondary schools in Benue State, Nigeria. This finding corroborate with the views of Hofstein and Lunetta (2004) who posits that the school laboratory offers opportunities for productive, cooperative interaction among students and with the teacher that have the potential to promote an especially positive environment. The school learning
environment and the management depends markedly on the nature of the school activities conducted in the laboratory. Similar in agreement with the finding, Eniaiyetu in Kafiyu (2006) observe that school laboratory is very important in the teaching and learning of science. It makes it easier for management to expose the child to alternative instructions and practical as well as learning through improvisation.

Conclusion
Based on the results of the study, it was concluded that school libraries and laboratories have significant influence on the management of secondary schools in Benue State, Nigeria.

Recommendations

Based on the findings of this study, it was recommended as follows;

1. School administrators should ensure that school library is built and well equipped with books to enhance effective teaching and learning in the school.

2. Government and non-governmental organizations should also take the responsibility of assisting schools in the building as well as provision of a well functional laboratories that could enhance effective management of schools.

References


