AVAILABILITY, ADEQUACY, EXTENT OF UTILIZATION AND MAINTENANCE OF PHYSICAL FACILITIES IN COLLEGES OF EDUCATION IN SOUTH EAST NIGERIA

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ABSTRACT
The study was set to investigate availability, adequacy, extent of utilization and maintenance of physical facilities in Nigerian colleges of Education. The scope of the study was limited to public and private colleges of Education in South East Nigeria. Three instruments designed by the researchers were used for data collection. The instruments include Checklist on Availability of Physical Facilities (CAPF), Checklist on Adequacy of Physical Facilities (CAPF) and Questionnaire on Extent of Utilization and Maintenance of Physical Facilities (QUMPF). The instruments were validated by two experts in Educational Foundations and Measurement and Evaluation of Ebonyi State University and also tested for reliability using spearman rho and cronbach alpha. All the tests yielded high index of 0.95, 0.74 and 0.93. Population of the study consisted of 13845 respondents made up of the principal officers and students of the colleges studied. Sample of 1,425 was drawn from the population through proportionate stratified random sampling technique and used for the study. Four research questions and four null hypotheses guided the study while data collected were analyze using frequency counts, percentages and mean. Hypotheses were tested using chi-square and't' test. Among the findings made were that physical facilities were available but not adequate in the colleges of education. Recommendations were made one of which is that adequate physical facilities should be provided to colleges of Education by relevant authorities.

INTRODUCTION

Background to the study
In any teaching and learning environment, buildings, playgrounds and mobile structures are provided to enhance efficiency. These are referred to as school physical facilities. Osahen (1998) defined school physical facilities as tangible structures, which serve educational purpose. They stand for the physical expression of the existence of any school as school programmes are expressed through them. Similarly, physical facilities according to Ehiametalor (2001) are
“operational inputs of every institutional programme”. For effective teaching and learning situation, physical facilities and educational goals should be viewed as being closely inter-woven and inter-independent. These physical facilities represent a learning environment, which has a tremendous impact on the comfort, safety and performance of the learner.

Colleges of Education are among institutions of learning formally designated to provide teacher education. In Nigeria, teacher education is given a major emphasis in all educational planning because of its importance. Colleges of Education will only carry out effective teacher education upon successful implementation of relevant programmes. Physical facilities ought to be available as they play major roles in the implementation process. Availability of physical facilities refers to provision made in this regard by and or to the colleges for effective teaching and learning. Provision of physical facilities should be among the very first preparation necessary for opening a new school. Adesina (1980) collaborated this view by insisting that proprietors opening new schools should adhere to existing regulations on provision of physical facilities.

The National Commission for Colleges of Education (NCCE) among several other responsibilities usually carry out a resource visit to any new College of Education whether public or private to ascertain the extent of availability of physical facilities for its programmes. Consequently, proprietors of both public and private colleges of education ought to ensure that provisions are made for needed physical facilities as availability of physical facilities such as lecture halls, classrooms, administrative blocks, students hostels, football fields, lawns, paths among others is a pre-requisite for approval of any college of Education in Nigeria. Physical facilities should be adequately provided to create favourable environment for learning. National Commission for Colleges of Education (2002) set out criteria for determining adequacy of facilities. For instance, a standard chemistry laboratory is meant to serve only 50 students at a time and would be considered inadequate when utilized by more than that number of students. Notably, availability of physical facilities in the Colleges of Education does not guarantee their adequacy and effective utilization and maintenance. It is then necessary to assess them based on the factors raised as inadequacy; poor utilization and maintenance constitute serious hindering factors in effective teaching and learning.

Basically, the standard or tone of any institution of learning is evaluated through examination of its physical facilities available for the implementation of its teaching and learning programmes. This is usually the basis upon which school supervisors insist that physical
facilities should be adequately put in place and the school neatly kept.

Similarly, one other important factor necessary for achieving the objectives of teaching and learning is the extent to which available physical facilities are utilized. Physical facilities apart from being provided are expected to be properly utilized for positive result attainment. Utilization of physical facilities is as important as making them available. It remains one of the major tasks of the college management to ensure that available physical facilities are effectively utilized. Enya (2008) opined that a greater proportion of our college objectives are achieved when there is effective utilization of necessary physical facilities than when contrary becomes the case. Since physical facilities cannot be isolated in pursuance of our educational objectives in our institutions of learning, they should be properly utilized.

Notably, the condition of the physical facilities will determine the extent of their utilization. This is quite essential because proper care for the college ground and buildings will always be a positive factor in college administration. It therefore calls for the necessity of carrying out effective regular maintenance on available physical facilities. Akilaiya (2001) stated that maintenance of the college physical facilities refers to keeping the building and equipment in as near as their original status as much as possible. Depreciations begin from the day the physical facilities are taken over by the user from the provider. The tear and wear off of the facilities result from usage, physical decay and accident; and growing out of utility will depend on the workmanship, climate and carefulness exhibited in handing them. Depreciation is inevitable but the rate can be controlled through regular maintenance.

Carrying out maintenance on college physical facilities is essential for effective teaching and learning for the following reasons.

Firstly, use of dilapidated school buildings and grounds that are unsafe or unsuitable for modern functional education purposes will lead to the production of mediocre. Such colleges cannot attain excellence in teaching and learning since teachers cannot discover giftedness in non-functional college environment.

Secondly, modernization of college facilities is a prerequisite in this era of modern technology and science. Enya (2008) stated that physical facilities ought to be kept in good conditions through regular and periodic maintenance. There is then the need to investigate on the extent physical facilities are maintained in Nigeria Colleges of Education. According to Okoro (2006) Provision of fund for plant maintenance should be a priority in the whole college business be it public or private. The National Commission for Colleges of Education (NCCE), also places a priority on provision of fund for plant maintenance while approving any new College of
Education whether public or private. Similarly, Okoro (2008) maintained that Provision of adequate physical facilities, which should be effectively utilized and maintained as and when due has remained a condition for accrediting the courses of any college of education. It seems there are differences between public and private colleges of Education in availability, adequacy, utilization and maintenance of physical facilities.

It is against this background, therefore, that this study is focused to investigate availability, adequacy, utilization and extent of maintenance of physical facilities in both public and private colleges of Education in the South East Nigeria.

Statement of the Problem
In the last two decades, the cost of financing education in Nigeria had increased and the non-corresponding expansion in facilities, equipment and material resources has resulted in gradual but general collapse of the education system, (Akilaiya, 2001).

Colleges of Education in Nigeria especially in the south east geopolitical zone presently and in all ramifications appear to have physical facility-related problems. Observation indicates that virtually all the Colleges of Education have overcrowded hostels, unconducive classrooms as most floors and walls are found dilapidated and hazardous. Similarly, doors and windows appear to be out of use and create a situation of insecurity while some college buildings are usually seen in bad condition with either blown-off roofs, broken walls, leaking roof or both which constitute danger to the lives of the users and invariably pose a threat to the programmes of the colleges. Again, most college environment appears untidily kept suggesting conservancy problems. Students are often seen struggling or queuing to use some facilities which is indicative of a problem of adequacy of available facilities.

It is sad to hear the often-negative opinion of most members of the public about some graduates of colleges of Education who majored in sciences on their lack of laboratory experience. The situation is disturbing and calls for thorough investigations into both the remote and immediate causes as no meaningful academic work in sciences may be attainable without functional laboratories. These problems call for serious concern hence the need to determine the actual state of needed physical facilities in the colleges. Thus, the problem of this study is to investigate availability, adequacy, extent of utilization and maintenance of physical facilities in the Colleges of Education in south eastern Nigeria.

Purpose of the study
The main purpose of this study is to ascertain availability, adequacy, extent of utilization and maintenance of physical facilities in Colleges of Education in Nigeria. Specifically, the study is set to:
1. Identify available physical facilities in the Colleges of Education
2. Investigate the adequacy or otherwise of physical facilities.
3. Find out extent of utilization of physical facilities
4. Find out extent of maintenance of physical facilities.

**Justification for the Research**

This study is significant for a number of reasons.

It is expected that the outcome of this study will help to restore the confidence of people to Nigeria Colleges of Education, which so many opinions such as Anene, (2002) and Ebru, (2005) have adjudged sub-standard in terms of programmes offered as a result of the condition of their physical facilities. The lack of expansion in facilities, equipment and materials resources in most College of Education has always negatively affected the views of most citizens about the credibility of their programmes.

The study will guide the management of the colleges of education through its recommendations on how to tackle problems associated with availability, adequacy, utilization and maintenance of physical facilities in Colleges of Education in Nigeria.

Those intending to establish schools will also benefit from the study. The study will guide them in making vital decisions such as determining the physical facility needs of the school, which will depend on the number and type of students to be immediately accommodated in the nearest future. This will make education in such a school more effective.

Furthermore, it is expected that the study will motivate all financiers of Education namely, the government, Parent-Teachers Association, Individual Parents, philanthropists, non-governmental organizations, voluntary agencies, good spirited individuals and lovers of Education to assess the level of availability, adequacy, utilization and maintenance of physical facilities in our colleges of education to enable them determine whether or not their contributions are needed for improvement. Similarly, the study will serve as eye opener to students on the extent of utilization of their college facilities for them to make adjustment where necessary. Adjustment would be necessary where facilities are either under or over utilized. College security out-fit would on their own part be guided by the findings of the study on how best to handle the issue of safeguarding and enforcing rules on physical facilities.

In addition, the study is profoundly significant in helping to save cost and prevent economic waste by leading to proper handling of physical facilities by college authorities, staff and students. Economic waste can also be avoided when available facilities are given adequate maintenance instead of making undue replacement.
Generally, the results of the study will help all users of college facilities especially the academic staff to improve on teaching and learning in Nigeria Colleges of Education by taking seriously the issues of provision, utilization and maintenance of physical facilities as they are highly significant in implementation of Educational programmes.

Scope of the Study

Research Questions
In carrying out this study, four research question were posed.
1. What physical facilities are available in Colleges of Education in South Eastern Nigeria?
2. What is the adequacy of physical facilities in colleges of education in South Eastern Nigeria?
3. To what extent are physical facilities utilized in the Colleges of Education?
4. To what extent are physical facilities maintained in the colleges of Education?

Hypotheses
To facilitate the investigation, the following null hypotheses will be tested at 0.05 level of significance.
1. There is no significance difference between public and private Colleges of Education in availability of physical facilities.
2. There is no significance difference between public and private college of education on adequacy of physical facilities.
3. There is no significance difference in the mean rating between public and private Colleges of Education on extent of utilization of physical facilities.
4. There is no significance difference in the mean rating between public and private colleges of Education on extent of maintenance of physical facilities.

METHOD
Design of the Study: The study adopted a descriptive survey design. Olaitan and Nwoke (1988) described a descriptive survey research design as one, which aims at collecting data on and describing in a systematic manner the characteristics, features or facts about a given population.
Population of the study: The population of the study consists of 13,845 respondents made up of 7 Provosts, 7 Registrars, 7 Directors of work, 7 Bursars, 40 Deans, 152 Heads of Department and 13,845 students. (See appendices A). The entire populations of the provosts, Registrars, Bursars, Directors of work, totaling 28 were involved in the study. Similarly, sample was not drawn from the 40 Deans of school and 152 Heads of Department. They were all used for the study. However, sample was drawn from 200 level students considered more convenient for the study as 100 level students were new in the college while 300 level students might not be readily available due to the busy nature of their level.

Sample and Sampling Technique: Proportionate stratified random sampling procedure was the technique for the selection of sample students. 30% of the population of each stratum was selected to realize 1205 as sample. Asika (2006) stated that 30% sample was adequate for a study of this nature. The study therefore made use of 1425 respondents (see appendix A1).

Instrument for Data Collection: Three instruments were designed for data collection. They include: Checklist on availability of physical facilities (CAPF), Checklist on Adequacy of physical facilities (CAPF) and Questionnaire on utilization and maintenance of physical facilities (QUMPF). Each of the instruments contains a preliminary section and a section B which contains a 50 item listed in cluster forms and columns created for the purpose of eliciting needed information.

Validation of the Instrument: The instruments were validated by two experts in Educational Administration and Planning and Measurement and Evaluation of Ebonyi State and Enugu State universities. As a result of their comments, some original items in the instruments were dropped.

Reliability of the instrument: The instrument on availability was determined for reliability using a test retest carried out on 30 respondents who were not part of the study. Spearman rho was also used to assess the reliability of the instrument. The instrument yielded alpha of 0.95 which is quite high.

Similarly, the reliability of the instrument on adequacy of physical facilities was determined through test retest administered on 26 respondents not included in the study. The instrument was assessed for reliability using Cronbach Alpha and it yielded 0.74 which shows high reliability. Also, the reliability of the instrument on extent of utilization and maintenance of physical facilities was determined using test rest carried out on 28 respondents not included in the study. It was equally assessed for reliability using Cronbach Alpha to realize alpha of 0.93 which indicates high reliability.
Administration of the Instrument:
Each of the colleges of education under study was visited by the researchers to complete the checklists while with the help of seven research assistants; the questionnaire was administered on the respondents who were expected to complete them. The entire questionnaire totaling 1425 were completed and returned.

Method of Data Analysis: Data collected were analyzed using frequency and percentage counts for research question one and two while means and were used to analyse research questions three and four. Hypothesis one and two were tested using chi-square while hypotheses three and four were tested with “t” test statistics.

Decision Rule: Based on the analysis, the following decision rules were adopted.
a. Frequency and percentage were used in determining research question one and two. Item was considered available or adequate if it scored up to 50%.
b. For research question three and four
   i. 3.5-4.0 score for very high utilization or maintenance
   ii. 2.5-3.0 scores for high utilization or maintenance
   iii. 1.5 – 2.0 scores for low utilization or maintenance
   iv. 0.5 – 1.0 scores for very low utilization or maintenance.

PRESENTATION AND ANALYSIS OF DATA
In this chapter, the data collected from the field for answering research questions and testing hypotheses are presented in tables to highlight the findings.

Research Question One: What are the physical facilities available in colleges of Education? Data Collected were analyzed on individual cluster basis using frequency and percentages as presented in table one.
Table shows that out of the 14 main facilities listed, only two were not available as indicated by the decision score of 50%. Those not available were numbers 6 (Demonstration and Exhibition facilities) and 10 (Religious facilities). Result then indicates that physical facilities were available in the colleges.

**Research Question two:** What is the adequacy of physical facilities?

Data collected were analyzed on individual cluster item basis using frequency and percentages as presented in table two below.
### Table II: Summary of Adequacy of Physical Facilities

<table>
<thead>
<tr>
<th>S/No</th>
<th>Item</th>
<th>No of Physical facilities Adequate</th>
<th>%</th>
<th>No of Physical Facilities Not Adequate</th>
<th>%</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Staff Facilities</td>
<td>7</td>
<td>20</td>
<td>28</td>
<td>5.7</td>
<td>Not adequate</td>
</tr>
<tr>
<td>2</td>
<td>Sporting</td>
<td>26</td>
<td>41.3</td>
<td>37</td>
<td>58.7</td>
<td>Not adequate</td>
</tr>
<tr>
<td>3</td>
<td>Lecturing facilities.</td>
<td>5</td>
<td>17.8</td>
<td>23</td>
<td>82.1</td>
<td>Not adequate</td>
</tr>
<tr>
<td>4</td>
<td>Laboratory facilities</td>
<td>12</td>
<td>28.6</td>
<td>30</td>
<td>71.4</td>
<td>Not adequate</td>
</tr>
<tr>
<td>5</td>
<td>Library</td>
<td>8</td>
<td>57.1</td>
<td>6</td>
<td>42.9</td>
<td>Adequate</td>
</tr>
<tr>
<td>6</td>
<td>Demonstration and Exhibition Facilities</td>
<td>7</td>
<td>12.5</td>
<td>41</td>
<td>73.2</td>
<td>Not adequate</td>
</tr>
<tr>
<td>7</td>
<td>Hostel</td>
<td>5</td>
<td>23.8</td>
<td>16</td>
<td>76.2</td>
<td>Not adequate</td>
</tr>
<tr>
<td>8</td>
<td>Refectory</td>
<td>3</td>
<td>14.3</td>
<td>18</td>
<td>85.7</td>
<td>Not adequate</td>
</tr>
<tr>
<td>9</td>
<td>Medical Facilities</td>
<td>3</td>
<td>42.9</td>
<td>4</td>
<td>57.1</td>
<td>Not adequate</td>
</tr>
<tr>
<td>10</td>
<td>Religious Facilities</td>
<td>1</td>
<td>7.1</td>
<td>13</td>
<td>92.9</td>
<td>Not adequate</td>
</tr>
<tr>
<td>11</td>
<td>Water/Power</td>
<td>17</td>
<td>60.7</td>
<td>11</td>
<td>39.3</td>
<td>Adequate</td>
</tr>
<tr>
<td>12</td>
<td>Security</td>
<td>1</td>
<td>14.3</td>
<td>6</td>
<td>85.7</td>
<td>Not adequate</td>
</tr>
<tr>
<td>13</td>
<td>Conservancy</td>
<td>2</td>
<td>28.6</td>
<td>5</td>
<td>71.4</td>
<td>Not adequate</td>
</tr>
<tr>
<td>14</td>
<td>General</td>
<td>4</td>
<td>57.1</td>
<td>3</td>
<td>42.9</td>
<td>Adequate</td>
</tr>
</tbody>
</table>

Table 2 shows that out of 14 major facilities listed, 10 were not adequate only three; numbers 8 (library facilities), 11 (water/power facilities) and 14 (general facilities) were adequate. Result therefore indicates that physical facilities in both public and private colleges of education were inadequate.

**Research question three:** To what extent are physical facilities utilized in colleges of education?

Data collected were analyzed on individual cluster item basis using mean as presented in table three.

### Table III: Summary of Extent of Utilization of Physical Facilities

<table>
<thead>
<tr>
<th>Responses</th>
<th>X</th>
<th>F</th>
<th>FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high extent</td>
<td>4</td>
<td>26,931</td>
<td>107,724</td>
</tr>
<tr>
<td>High extent</td>
<td>3</td>
<td>27,048</td>
<td>81,144</td>
</tr>
<tr>
<td>Low extent</td>
<td>2</td>
<td>9,697</td>
<td>19,394</td>
</tr>
<tr>
<td>Very low extent</td>
<td>1</td>
<td>4,308</td>
<td>4,308</td>
</tr>
</tbody>
</table>

\[
\text{Mean } = \overline{X} = 3.127
\]

\[\overline{X} = 3.127\]
Table 3 shows that physical facilities listed were very highly utilized given the frequency of responses indicating facilities being utilized at very high extent. High extent, low extent and very low extent all had responses lower than that of very high extent. Physical facilities are therefore very highly utilized in the colleges.

**Research question four:** To what extent are physical facilities maintained in the Colleges of Education?

Table IV: Extent of Utilization of Physical Facilities
Data collected were analyzed on individual cluster item basis using mean as presented in table four.

<table>
<thead>
<tr>
<th>Responses</th>
<th>X</th>
<th>F</th>
<th>FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high extent</td>
<td>4</td>
<td>3,503</td>
<td>14,012</td>
</tr>
<tr>
<td>High extent</td>
<td>3</td>
<td>8,845</td>
<td>26,535</td>
</tr>
<tr>
<td>Low extent</td>
<td>2</td>
<td>24,361</td>
<td>48,722</td>
</tr>
<tr>
<td>Very low extent</td>
<td>1</td>
<td>34,541</td>
<td>34,541</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>71,250</td>
<td>123,810</td>
</tr>
</tbody>
</table>

Mean = $\bar{X} = 1.738$  
$\bar{X} = 1.738$

Table 4 shows that in the colleges of education, maintenance of physical facilities was low given the frequency of responses attached to it. Very high extent, high extent and very low extent had lower response rate. Maintenance of physical facilities is therefore low in the colleges.

H0: There is no significant difference between the mean rating of public and private colleges of Education in availability of physical facilities.
Table V: Chi-square ($X^2$) Summary of Public and Private Colleges of Education rating on availability of Physical facilities.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Available</th>
<th>Not Available</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public colleges of Education</td>
<td>75</td>
<td>26</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>(69.6)</td>
<td>(31.3)</td>
<td></td>
</tr>
<tr>
<td>Private colleges of Education</td>
<td>63</td>
<td>36</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>(68.3)</td>
<td>(30.6)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>138</strong></td>
<td><strong>62</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

Therefore $X^2 = \sum \frac{(0-E)^2}{E}$; $P<0.05$, $DF=1$

The calculated value of chi-square = 8.84, while the critical value of chi square = 3.84. The calculated chi value is greater than critical value; therefore the null hypothesis is not accepted.

H02: There is no significant difference between the mean rating of public and private colleges of Education in Adequacy of physical facilities.

Table VI: Chi square ($X^2$) Summary of public and private colleges of Education rating on the adequacy of physical facilities.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Available</th>
<th>Not Available</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public colleges of Education</td>
<td>30</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(30.1)</td>
<td>(69.8)</td>
<td></td>
</tr>
<tr>
<td>Private colleges of Education</td>
<td>30</td>
<td>69</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>(29.8)</td>
<td>(69.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>139</strong></td>
<td><strong>199</strong></td>
</tr>
</tbody>
</table>

Therefore $X^2 = \sum \frac{(0-E)^2}{E}$  

$X^2$ cal = 2.31  
$X^2$ crit = 3.84, at 0.05 Alpha level  
df =1

Therefore, since the chi calculated value 2.31 is less than the chi critical value of 3.84, the hypothesis is accepted.

H03: There is no significant difference between the mean rating of public and private colleges of Education in utilization of physical facilities.
Table VII: T-test summary of difference between the mean ratings of public and private colleges of Education on utilization of physical facilities.

<table>
<thead>
<tr>
<th>Institution</th>
<th>N</th>
<th>Mean X</th>
<th>Df</th>
<th>t-cal</th>
<th>t-crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public college of Education</td>
<td>803</td>
<td>3.1</td>
<td></td>
<td>1.31</td>
<td>1.96</td>
<td>Accept H0</td>
</tr>
<tr>
<td>Private college of Education</td>
<td>622</td>
<td>3.08</td>
<td>1423</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is observed that at 0.05 level of significance, the t-critical value of 1.96 is greater than the calculated t-value of 1.31. The null hypothesis is therefore accepted showing that there is no significant difference in the mean rating of public and private colleges of education on the utilization of physical facilities.

Table VIII: T-test summary of difference between the mean ratings of public and private college of Education on the maintenance of physical facilities.

<table>
<thead>
<tr>
<th>Institution</th>
<th>N</th>
<th>Mean X</th>
<th>Df</th>
<th>t-cal</th>
<th>t-crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public college of Education</td>
<td>803</td>
<td>1.78</td>
<td></td>
<td>5.21</td>
<td>1.96</td>
<td>H0 not Accepted</td>
</tr>
<tr>
<td>Private college of Education</td>
<td>622</td>
<td>1.70</td>
<td>1423</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the t-critical value of 1.96 is less than the calculated t-value of 5.21, the null-hypothesis is therefore not accepted. Implying that, there is significant difference in the mean rating of Public and Private Colleges of Education in the maintenance of physical facilities.

Summary of Major Findings

Based on the analysis of data collected for this study, the following major findings were made:

a. Physical facilities are available in public and private colleges of education in the South East Nigeria.
b. Available physical facilities are not adequate

c. Public and private Colleges of Education highly utilize physical facilities

d. There is low maintenance of physical facilities in all the colleges studied

e. Maintenance seems better carried out in the private colleges

**DISCUSSION, CONCLUSION AND RECOMMENDATION**

The findings of the study were discussed based on the four research questions and four null hypotheses that guided the study. Discussion was however based on the following sub-headings.

i. Availability of physical facilities

ii. Adequacy of physical facilities

iii. Extent of utilization of physical facilities

iv. Extent of maintenance of physical facilities

**Availability of Physical Facilities**

Table 1 provided answer to research question one which was posed to ascertain available physical facilities in the colleges of Education. From the analysis, 2 out of 14 cluster items listed were not available. The facilities not available are in the area of demonstration/exhibition facilities and religious facilities. These facilities ought to be available considering their importance in teaching and learning. However, results revealed that physical facilities were available in the Colleges of Education since 38 items representing 76% of the items listed were available. This collaborates with Adebiyi (2004) who opined that physical facilities were available in Nigerian Colleges of Education. The non acceptance of hypothesis one indicates that physical facilities were available to both public and private college of Education but with some disparities. It then implies that Education managers in both public and private colleges of Education though aware of the role physical facilities play in teaching and learning, allow disparities to exist in the provision of the facilities.

**Adequacy of Physical Facilities**

Research question two was posed to elicit response about adequacy of physical facilities. Results in table two show that out of the 14 cluster items listed, only 3 were rated adequate leaving the remaining 11 items as inadequate. This is quite revealing as Mba (2003) had earlier expressed doubt that physical facilities were adequately available in Colleges of Education.

Similarly, Ndu et al (1997) stated that the ultimate aim of planning the school plant is to ensure that favourable environment for learning is provided, and this can be done through careful choice of site, adequate provision of buildings and other categories of facilities. The acceptance of hypothesis two confirmed the position of research question two that physical facilities
were inadequate in both public and private colleges of education.

**Extent of Utilization of Physical Facilities**

The perception of the respondents about the extent of utilization of physical facilities was noted using research question three. From the analysis, it was found that physical facilities were being very highly utilized having been rated with a total frequency response of 107,724 as against high utilization, low utilization and very low utilization which were rated 81,144,19,394 and 4,308 each.

The result is understandable given the importance of school physical facilities in teaching and learning. Ojedele (2003) observed that no meaningful teaching and learning will take place without physical facilities which must be effectively utilized to achieve desired result. Effective utilization of school physical facilities therefore improves teaching and learning.

The acceptance of hypothesis three which states that “There is no significance difference between public and private colleges of Education in utilization of physical facilities” collaborates the result of the research question that physical facilities were being utilized in very high extent in the colleges. The finding is not surprising as any meaningful teaching and learning will not take place where physical facilities are not very highly utilized. Uche (1990) confirmed that in both public and private schools, facilities were being utilized as required but regretted that most schools do not have regulations on usage of facilities.

**Extent of Maintenance of Physical Facilities**

Responses of the respondents on extent of maintenance of physical facilities were elicited using research question four. Results on table four show their perception as it was found that all the physical facilities listed were being maintained in a low extent having had more frequency response than those of very high, high and very low extents. The revelation of the study was expected given the position of notable scholars such as Nwangwu, et al (2001) that lamented that billions of naira had been spent in the construction of school buildings across the country, purchase of equipment, machines and furniture to enhance teaching and learning while only very little attention had ever been given to their maintenance.

Also Facina (2005) observed that in Nigeria, maintenance culture was generally poor as it was easier to build new schools than maintain existing ones. Ndu et al (1997) noted that most college physical facilities lose their originality as a result of careless handling, negligence and abandonment.

The result of hypothesis four presented in table eight shows the non acceptance of the hypothesis in all the items listed. The null hypothesis
should then be replaced with the alternative one that “there is significance difference between public and private Colleges of Education in the maintenance of physical facilities. Though facilities were being maintained at low extent in all the colleges, there appear to be possibilities that private institutions do better than the public ones in the maintenance of physical facilities. The position agrees with Ogonor and Sanni (2001) which assumed that maintenance activities on facilities were better carried out in private schools than public ones.

Conclusion
Based on the analysis of data for this study, the researchers concluded that physical facilities are available in the colleges of Education in the South East Nigeria as non available ones are insignificant though necessary in teaching and learning. It was also found that available physical facilities are inadequate for the purpose they are meant to serve even as the inadequate facilities are concentrated in high utilization in all the colleges of education. The study equally revealed that there is problem in facility maintenance since all the physical facilities listed for purpose of the research are maintained in low extent especially in public colleges of Education. Maintenance of physical facilities was adjudged better in the private colleges than public ones. This is dangerous for educational development as majority of learners at that level enroll in public colleges.

Recommendations
Based on the revelations of the study after extensive discussions of the results, the researchers made the following recommendations:
1. Few Physical facilities that are not available should be provided in all the colleges by relevant authorities in order not to undermine their enormous contributions to educational development.
2. All other stakeholders such as Alumni Associations and relevant non governmental organizations should help in providing adequate physical facilities to colleges of Education.
3. College of Education proprietors and management should ensure regular maintenance of physical facilities in their institutions.
4. Government (Federal and state ministries of Education) should come up with a comprehensive guideline on maintenance of school facilities to enable college management have operational document with regards to maintenance of physical facilities. This will help to check inefficiency among college authorities.
5. Students and staff should be given proper orientation on how to handle college facilities through regular seminars and workshops.
REFERENCES


