AN EXAMINATION OF FACILITY MANAGEMENT PRACTICE IN AN ACADEMIC INSTITUTION [ACASE STUDY OF FEDERAL POLYTECHNIC BAUCHI:]

DOMINION AGWELA ANOSIKE
Department of Estate Management, Federal Polytechnic, Bauchi

ABSTRACT
An academic institution is made up of facilities which make it conducive for learning. The state of these facilities determines the rate at which the institution’s goals and objectives are being realized. New facilities are being purchased from time to time to replace obsolete ones. These facilities must be maintained adequately in order to achieve their optimum utilization. Advancement in science and technology necessitates that modern methods be adopted in schools facilities management. This will enhance the quality of teaching and learning. This study describes the nature of facilities in an institution of higher learning, the different levels of facilities utilization in schools and the need to control the utilization of such facilities. The importance of good and adequate maintenance of schools’ facilities was also highlighted. A research was carried out on the nature of maintenance employed on certain facilities in the Federal Polytechnic, Bauchi. Findings revealed that the corrective maintenance is most often adopted in the maintenance of facilities. The study recommended that facilities are best maintained using the preventive maintenance method. It also recommended training and enlightenment for stakeholders, and the provision of adequate facilities and their replacement as at when due.

KEY WORDS: Academic institution, School facilities, Facilities management, Facilities utilization, facilities maintenance

An academic institution is comprised of facilities designed to enhance learning. The management of these facilities play a vital role in achieving the educational goals and objectives of the institution. It ensures that the environment is physically and emotionally conducive for learning. Several scholars have proven that the quality of education bears a direct relevance to the availability or lack thereof of physical facilities and overall atmosphere in which learning takes place. (Asiabake, 2003). Facilities in higher institution of learning will include the following:- academic buildings, office buildings, Hotels, staff housing, sporting facilities, paths, roads, farms α gardens, transportation services, security services, maintenance outfit, hospital facility, religious buildings, furniture and equipment, plant and machinery, ICT, janitorial services, food services, fire service, electricity and water supply.

WHAT IS FACILITY MANAGEMENT?
According to shah (2007), facilities management (FM) means many things to many people-at one end it leaves a core team to manage the business with a series of contractors to perform the non-core activities. At the other, it is the in-house provision of most activities with limited out-tasking such as cleaning. Facility management is the design, management and implementation of all non-core activities within an organization allowing the core activities to maximize cost efficiency. (John Davis). As stated in shah (2007). Facility management is also defined as, a business practice that optimizes people, process, assets and the work environment to support delivery of the organization’s business objective. FMA Australia’s Glossary of FM terms.
On a general note, facility management is the integration of multi-disciplinary activities within the built environment and the management of their impact upon people and the workplace.

**FACILITIES MANAGEMENT IN SCHOOLS.**

The provision of good quality and high standard educational facilities in schools and the management of same constitute an essential input in the generation of a favorable learning environment, facilitate interaction and enhance the achievement of educational objectives.

According to Asiyai (2012), school facility maintenance entails ensuring that the facilities are kept near their original state as possible. School facilities management involves keeping records of the facilities, supervising the facilities, planning for the facilities, motivating students and staff to participate in facilities maintenance and evaluating the available facilities.

The role of the school administrators in the management and maintenance of school facilities were periodic inspection of the facilities, decentralization of maintenance, preventive and emergency maintenance, keeping records of school facilities and seeking community involvement in facilities management and maintenance.

The utilization of school facilities determines the extent of disrepairs and the need for maintenance or replacement of these facilities.

Adeboyeje (2000) stated that utilization is the degree or extent to which an item has been put into effective use. According to him, various degrees of utilization include non-utilization, under utilization, maximum utilization, optimum utilization and over-utilization.

Non-utilization occurs when a facility is not put into use at all. When a facility is not used in its full capacity, under utilization occurs. There is over-utilization when a facility is used beyond its capacity. These degrees of utilization constitute a waste of resources and are counter productive. Maximum utilization occurs when facilities are put into effective usage in line with primary objectives. Optimum utilization occurs when facilities are used for many purposes by the school and members of the community.

Resources put into maximum and optimum usage are not wasted.

**MAINTENANCE OF EDUCATIONAL FACILITIES**

An academic institution will continue to acquire new facilities as it grows and as old facilities become obsolete. As soon as facilities are provided and put into use, they begin to deteriorate in value and functional state. There is a need for regular maintenance to forestall their physical condition and working capacity.

Maintenance is any work necessary to maintain the original expected useful life of a fixed asset. It enhances performance and durability and also prevents waste.

Hall, (2013) defined maintenance as all work necessary to keep or restore every facility to an acceptable standard at an acceptable cost.

Maintenance applies to all work to a completed building and will include:

a) Normal maintenance including repairs and replacements

b) Alterations, extensions, adaptations.

c) Refurbishment, rehabilitation.

d) Redecoration and cleaning

According to Cotts (1998), maintenance includes periodic or occasional inspection, adjustment, lubrication, cleaning [non-janitorial], painting, replacement of parts, minor repairs and other actions to prolong service and prevent unscheduled breakdown, but it does not prolong the life of the property or equipment or add to its value.

BS. 3811: 1964 as stated in Woodsworth (2001), defines maintenance as a combination of any actions carried out to retain an item in, or restore it to, an acceptable condition.
He went on to state the two processes envisaged, ‘retaining,’ i.e., work carried out in anticipation of failure; and ‘restoring,’ i.e., work carried out after failure. The former being referred to as ‘preventive maintenance’ and the latter as ‘corrective maintenance.’

The following advantages are attributable to good maintenance practices.

i) It improves the value of the property.
ii) It contributes to the esthetics of an environment.
iii) It enhances the morale of staff in an organisation.
iv) It allows a building to be used to its full potential.
v) It extends the life of main materials and components.
vi) It ensures suitable standard of safety in a building.
vii) It is used to satisfy Statutory Requirements e.g. providing a means of escape in building.
viii) It ensures the Best Use of materials and components.

Adeboyeje(2000) identified four types of maintenance namely, preventive, corrective, breakdown and shutdown maintenance services.

Preventive maintenance occurs regularly by checking and rechecking the available facilities and taking necessary measures to prevent mal-functioning or non-functioning of a particular facility. Preventive maintenance is proactive in nature; it is cheaper and better than other measures.

Corrective maintenance involves reactivation or replacement of facilities in order to normalize their performance. When a facility or equipment breaks down completely, a major repair or replacement may be needed.

Sometimes an institution may need to close down in order to allow for a major repair to be carried out such a situation may arise as a result of flood, fire or wind disaster which has affected some of the institutions facility. Such works are referred to as shutdown maintenance.

METHODOLOGY

A study was done on the nature of maintenance carried out on certain facilities in the Federal Polytechnic, Bauchi. The questionnaire was the instrument of data collection. The stratified sampling technique was adopted in the data collected from the Operatives of the works department and other members of the Polytechnic community.

Information gathered is as shown in table 1 below.

FINDINGS

The study shows that corrective maintenance is most often adopted in the maintenance of facilities at the Federal Polytechnic, Bauchi.

This is as indicated by 48% of the responses.

TABLE 1
SHOWING THE NATURE OF FACILITIES MAINTENANCE ADOPTED IN THE FEDERAL POLYTECHNIC, BAUCHI.

<table>
<thead>
<tr>
<th>MAINTENANCE TYPE</th>
<th>FACILITY TYPE</th>
<th>preventive</th>
<th>corrective</th>
<th>breakdown</th>
<th>shutdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Electricity Generator plant.</td>
<td>20</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Motor vehicles</td>
<td>20</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Machinery Equipment</td>
<td>19</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Academic Buildings</td>
<td>12</td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Staff houses</td>
<td>11</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Hostels</td>
<td>09</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Office Buildings</td>
<td>17</td>
<td>03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Road network  
9. Sporting facilities  
10. Water supply  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>5</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>117</td>
<td>69</td>
</tr>
</tbody>
</table>


CONCLUSION
The preventive maintenance culture is most appropriate for the management of facilities, it requires regular checking and rechecking of available facilities and adopting all necessary measures to forestall mal functioning or non-functioning of facilities.

RECOMMENDATIONS
1. Schools should introduce courses on maintenance culture in their curriculum, so that teachers and students become conscious of the need to keep school facilities in good state.
2. Adequate facilities should be provided in the different sectors of the institution to avoid over utilization of facilities.
3. Obsolete facilities should be replaced at the appropriate time to maintain high academic standard.
4. Trainings and workshops should be organized for the operatives of the facilities management to enlighten them on the need for adequate maintenance of facilities.
5. An enlightenment should be carried out on all stakeholders in school on the need for proper utilization of facilities.

REFERENCES


