

## **SCHOOL PLANT MAINTENANCE: THE ROLE OF PUBLIC SECONDARY SCHOOL PRINCIPALS**

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### **Abstract**

This paper highlighted the usefulness of maintenance of school plant in public secondary schools in Abia State; x-raying the role of principals in ensuring that all facilities used for teaching-learning process are in good functioning condition. School plant includes all facilities in an educational institution that enhance teaching and learning. It is a very important input into the school system that helps boost teachers' effectiveness and increase students' academic performance referred to as the output. The input-output production theory in education lays credence to this paper. Yet many literature are replete with evidences of the existence of poorly maintained school plant in most public secondary schools. Examples are the existence of dilapidated school buildings with leaking roofs or no roofs at all, broken chalkboards and desks, cracked classroom floors and overgrown unkempt lawns. Although all users of these facilities have the responsibility of careful and proper care of these facilities to slow down the rate of depreciation in their use value, the onus lies on the principal to ensure excellent maintenance of the school plant through for example, regular checks, replacement, cleaning, clearing, and repainting as the case may be. The paper concluded that maintenance of school plant as one of the core administrative responsibilities of principals helps in the ultimate actualization of stated education goal and objectives.

**Keywords:** Learning facilities, effectiveness, administrative responsibilities

### **Introduction**

There is observed increase in student population in secondary schools in Abia State without a seeming proportional increase in the learning facilities. This obviously results in the overuse of available school plant due to constant pressure on the facilities. This results in accelerated depreciation of school plant which brings to fore the importance of maintenance of school plant like buildings,

desks, chalkboards, and even lawns for example.

School plant refers to all educational facilities that enhance teaching and learning. School plant is one important input into the education system. Therefore, expecting an excellent output from the system entails ensuring an equally excellent input into the system. This, of course, is hinged on the input-output production theory in education.

The frequent use of school plant inteaching results in the depreciation in the use of the facilities through what can generally be referred to as wear and tear on the school plant. Since this is inevitable, maintenance becomes imperative, and the principal as the head of administration in secondary schools school plant is expected to ensure adequate maintenance of school plant in collaboration with other users in the school community.

Evidences abound of poorly maintained and often neglected school plant in public secondary schools like broken chairs, tables, cracked boards, dilapidated buildings, spoilt laboratories and libraries. In fact several authors have also acknowledged the existence of poorly maintained school plant that cut across different levels of education (Asiegbu in Ekpoh, 2018). There is often public outcry about the seeming neglect of school plant by the administrators in the public secondary schools. To say the least, such abandoned school facilities present ugly sights and are a waste of insufficient financial resources.

It seems that maintenance of facilities such as repairs only take place when such

facilities have constituted not just health hazards but have become life-threatening objects. Ajijo (2005) and Ibeh (2017) cited in Ekpoh (2018 p.139) reported incidences of school “building walls collapsing and killing both staff and pupils in some parts of Nigeria”. This ugly incident can be averted by prompt maintenance of school plant. This therefore calls for the urgent and regular maintenance by school principals in particular and the administrative head at all levels of education.

There is no gain-saying the fact that poorly maintained school plant infringes on the overall learners’ academic performance and ultimately slows down the achievement of secondary school objectives and by extension the actualization of set education goals. It is indeed really worrisome the level of untidiness that exist in public secondary schools and one wonders if the principals do exhibit any maintenance acumen in ensuring that all directly involved in using any school plant are maintenance conscious. Figures 1 and 2 are typical examples of school plant that require maintenance.



Figure 1: A Dilapidated School Building

### **Concepts of School Plant and School Plant Maintenance**

There are diverse conceptual views of what school plant is. However, these conceptual views are not mutually exclusive. As a matter of fact, all educational facilities in a school that enhance teaching and learning are referred to as school plant. Olowonefa and Kalu (2016) explained that school plant are the controlled environment that facilitate teaching and learning in addition to protecting the physical well being of the occupants of the school. Knezevich in Nwokocha and Anyawu (2012) described school plant as the space interpretation of school curriculum, and that the physical expression of the curriculum is made obvious in the construction and arrangement of school plant; concluding that as long as teaching and learning do not occur in a vacuum, school plant generally speaking, gives meaning to planned curriculum in a school.



Figure 2: Classroom with Broken Ceiling

Caslaisi in Nwokocha and Anyanwu (2012 p.66) defined “school plant as those things of education which enable a skilful teacher to achieve a level of instructional effectiveness that far exceeds what is possible when they are not provided.” Examples of school plant include buildings like classrooms, laboratories, libraries, offices, hostels, teachers’ quarters *et cetera*. It also consists of open spaces used for recreational activities, car parks and school farmlands.

School plant maintenance are the activities expected to be undertaken by school administrators aimed at repairing school plants in order to restore them to their near original condition. As a matter of fact, it is a continuous effort that is aimed at checking, repairing, renewing, repainting, remodelling and modifying school plants so that they remain in continuous use (Kpee, 2013). All school plants, from that which is considered the least like classroom desks, chalkboards to the bigger

ones like buildings including the lawns need maintenance by way of regular cleaning, prompt repairs of any observed damage, repainting of buildings, changing of leaking roofs and cutting of lawns.

Nwokocha and Anyanwu (2012) opined that school plant maintenance are cyclic and intermittent services carried out to keep school plants near their original state. The whole essence is to slow down the rate of depreciation of school plant which could be due to wear and tear associated with usage, effect of weather condition and sometimes expiration of the facilities that render it obsolete.

### **School Plant Maintenance Classification**

Adeyemi, Hezekiah and Aderemi in Nwokocha and Anyanwu (2012) classified school plant into four namely: emergency, short-range, annual and long-range maintenance. Emergency maintenance occurs when there is accidental damage of school plant by things like natural disaster or damage caused by learners during unrest. The school administrators will hurriedly effect repairs, remodel, rehabilitate or change completely the damaged school plant.

Short-range periodic maintenance of school plant is more like a preventive measure. This entails carrying out a regular routine check on school facilities.

This helps administrators or principals of secondary schools to identify decaying school plants early enough so as to rectify the damage before it degenerates completely.

Annual maintenance as the name depicts is undertaken yearly. It involves a yearly inspection of existing school facilities to effect repairs, replacement of damaged school plant. The maintenance could be in form of cleaning, replacement of broken ceilings, chalkboards or even repainting.

Long-range maintenance is done after a long time without any specified duration. This often entails complete replacement of damaged school plant that can no longer be used or managed examples of which include furniture, ceiling, roofs of buildings, fixing of broken floor tiles and cracked chalkboards. This involves modernization, remodelling and rehabilitation of damaged school plant (Nwokocha & Anyanwu, 2012).

On the other hand, Jordan in Oke and Mainoma (2014) categorized maintenance services into three interrelated activities namely:

1. Regular maintenance
2. Preventive maintenance
3. Emergency maintenance

Regular maintenance services of school plants are carried out periodically to avert a complete breakdown of any school facility. This will help ensure continuous teaching and learning in schools. These services are carefully planned and are routinely carried out and are achieved through regular checking of these facilities.

Preventive maintenance services could be likened to regular maintenance services. This is because regular maintenance services are preventive in outlook. The essence of both preventive and regular maintenance services is to identify early enough school facilities that are getting damaged so that they are repaired before complete damage is done. Any school facility that is used regularly is prone to damage anytime; therefore principals are to carryout regular and preventive maintenance activities.

Emergency maintenance services take place as the situation arises. Immediately it is noticed that a school facility has broken down often accidentally, the principal organises emergency maintenance through quick repairs or replacement. Other types of maintenance activities include recurring maintenance, corrective maintenance, deferred maintenance, predictive maintenance and shutdown maintenance (Ekpoh, 2018).

### **Rationale for School Plant Maintenance**

In line with the meaning of maintenance as an activity aimed at keeping something in a good condition to prevent accelerated deterioration, the importance and reasons school principals should ensure continuous maintenance of school plant are numerous. A very obvious reason is that at least it gives the school a face lift and enhances good teaching and learning activities. Who would not enjoy teaching and learning in a well-maintained school that has well-maintained school facilities? School plant maintenance ensures directly or indirectly increased student academic performance. After all, take for example, how would students learn during rainy season in a classroom that has leaking roof?

A classroom that has broken chalkboard, desks and cracked floor definitely dampens the spirit of academics in both the teacher and the learner as is seen in public secondary schools. No wonder Nwagwu in Oboegbulum and Chiaha (2007) noted that the quality and number of infrastructure like buildings, learning facilities, machinery and equipment help in any attempt to balance the qualitative and quantitative growth of a given educational system. In fact, teaching and learning are affected by the school environment either positively or negatively.

School plant maintenance enhances teacher effectiveness. For instance, a science teacher that has well maintained laboratory with functional laboratory facilities will definitely perform well. It will assist the teacher to make practical whatever topic that is taught. Therefore, maintenance of school plant generally helps compliment the teachers' efforts towards actualizing students' increased academic performance.

School plant maintenance is cost-effective because it is cheaper to carry out routine maintenance for example than allow school facilities to completely go bad and get them replaced completely. School plant maintenance prevents loss of lives of both staff and students. A school building that has cracked and broken walls has a high tendency to fall unannounced, but prompt repair will prevent it from falling on the users. The principal carries out preventive maintenance.

Taiwo in Ekpoh (2018) asserted that maintenance of school plant makes students' learning pleasant as well as enhances teachers' effectiveness. Explaining further by giving an example of how a well-maintained chalkboard can make the teacher to write clearly and visibly for the students. No wonder, studies show high positive relationship between school plant maintenance and the

academic performance of students. Oyedeki in Ekpoh (2018) opined that there exists a positive relationship between good school plant maintenance and its functionality. A well-maintained facility in a well- maintained school environment helps students psychologically resulting in good academic performance.

Many studies for instance, that by Akpa (2001), Ajayi (2007) and National Centre for Education Statistics (NCES), (2003) has summarized the importance of school plant maintenance laying credence to the reason it must be carried out conscientiously by school principals. These include that it:

- preserves the aesthetic outlay of a school thereby providing a favourable environment for teaching and learning.
- ensures the safety of school buildings, facilitates and reduces the attendant health hazards to both staff and students.
- ensures that school plants are in good condition for optimal functionality
- reduces the dilapidation and repair rates of school plants and therefore saves cost.

### **The Role of the Principal in School Plant Maintenance**

It is noteworthy at this juncture to reiterate that the maintenance of school plant is the



responsibility of all users of the facilities and not just that of the school principals. But this paper sees the principal as the administrator of the school to be primarily responsible for ensuring that the school facilities are well-maintained. This can be achieved by placing people in-charge for the maintenance of different school plant and are accountable to the principal. The whole essence is to collectively achieve the school objectives and by extension, the education goals.

Planning school plant without making provision for its maintenance is faulty. Therefore the principal remains the person to ensure effective maintenance of school plant. Ekpoh (2018) asserted that the school principal is responsible for keeping school facilities in good condition in a conducive environment explaining the importance of the principal mapping out school maintenance programme and ensuring its applicability. It will not be out of place to include the cost of school plant maintenance in the school budget because funds are needed for school plant maintenance because some materials are needed for routine maintenance of certain school plants like toiletries, brooms, brushes, lawn cutter.

How the principal carries out the school plant maintenance role is not sacrosanct because the *modus operandi* depends on the principal's management acumen and

contemporary existing situations. Suffice this to say that the principal as the administrator in secondary schools in Nigeria is an important tool for achieving the required maintenance of school plants for the eventual actualization of the national educational goals and objectives.

### **Conclusion**

To achieve the nation's education goals and objectives, a well-maintained and functional school plant is very important in all public secondary schools. School plants are all facilities in an educational institution that facilitate teaching and learning processes. School plant maintenance includes activities by all stakeholders and especially the primary users of the facilities to get them in good and functional condition. This is very important in the face of seemingly increased student enrolment without a concomitant increase in the facilities for learning in schools. This brings much pressure resulting in quick wear and tear of existing school plant.

Be that as it may, any school facility that is constantly used is bound to deteriorate and some might even become obsolete. Therefore the importance of school plant maintenance cannot be neglected. Maintenance of school facilities keeps them in good and functional condition for increased teacher effectiveness and

enhanced academic performance of the students.

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