



Influence of School Plant Management Practices on effective Teaching in Senior Secondary Schools in Rivers West Senatorial District Rivers State

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ABSTRACT

This study examined the Influence of School Plant Management Practices on Effective Teaching in Rivers West Senatorial District of Rivers State. A description survey design was adopted for the study. To achieve the purpose of the study, the researcher developed two research questions and corresponding hypotheses to guide the study. The population of the study comprised of all the principals and all the teachers which is 70 principals and 1,242 teachers. The sampling technique used is simple random sampling technique with a sample size of 443 principals and teachers. The instrument used for data collection was a self-structured questionnaire titled, Influence of School Planting Management Practices on Effective Teaching questionnaire (ISPMPETQ) structured in a four (4) point Likert rating scale. The instrument was face and content validated by two experts while the reliability of the instrument was established as 0.84 through Pearson Product Moment Correlation (PPMC) coefficient. Mean statistics was used to answer research questions while null hypotheses were tested using z-test at 0.05 level. The findings reveal that effective teaching can be facilitated where there are adequate and effective management practices of school farm and school laboratory. It was recommended among others that principals should ensure effective supervision and inspection of school farms. Government should provide school laboratory facilities to schools for teaching and learning.

Keywords: School Plant, Management Practices and Effective Teaching

INTRODUCTION

School plant management is a vital aspect of school administration. School plant management depends on the understanding of the total philosophy and purpose of the school. School plant management is a total skill, a sum of many tasks and practices, each bearing a relationship to the whole. An effective and efficient management of school plant contribute tremendously to efficient instructional programs as well as general development of education. Federal Republic of Nigeria (FRN) in her National Policy on education (FRN, 2013) stated that the nation has adopted education as an instrument per excellence and national development. It stated further that education would continue to be highly rated in the national development plans because one of the most important instruments for change has been education.

Adesina and Ogunaju (2011) in their recognition of the need for school plant in secondary schools opined that, for effective teaching and learning activities to take place, school plants and educational goals should be viewed as interdependent. School plant provides experiences that stimulate self-activities on the part of the learner and these help to concretize the ideas and increase learning outcome for instance in knowledge, skill and change in attitude. Thus, the need for proper management and upgrading school plant for effective teaching and learning cannot be overemphasized as students learn well and more when

facilities and environment are conducive, serene, functional and attractive. In addition, Federal Republic of Nigeria (2013) emphasized the establishment of sick bay as part of school plant in all educational institutions to cater for the students' health issues, to make learning and learning environment more conducive and meaningful. According to Gede (2011), school plant management practices is a systematic process of rationalizing the provision, use and maintenance of school plant for optimal utilization and achievement of educational objectives both in the immediate and in the future.

Similarly, school plant management is a process that involves keeping records of the school plants, supervising, inspecting, planning, motivating, procurement, maintenance and evaluating the available school plant. In addition, school plant management practice involves planning, mapping of school environment, effective coordination, monitoring of activities and programmes, logistics and surveillance of both human, materials and facilities for optimum educational delivery. Over the years, there has been a global concern for improving school plant management practices in secondary schools by school administrators, parents, teachers and the general society. This means that the importance attached to school plant implies that not only should they be provided but should also be well managed. Management is the live wire of any educational establishment for the achievement of school policies and objectives. Adesina in Ninikanwa (2014) defines management as the organization and mobilization of all human and material resources in an institution for the achievement of defined objectives.

From the above view, Odupurokan (2011) stated that a well-managed school plant would gear up expected outcomes of education that will facilitate good social, political, economic emancipation. Hence; the responsibility of managing school plants in secondary schools in the state, rests on the principals and administrative staff of Senior Secondary Education Board in Rivers State. The principal is the chief executive of secondary schools in Nigeria. He is charged with the responsibility of ensuring that school buildings, facilities and the total school environment is properly managed and maintained to ensure effective teaching and learning in the schools. The principals' role in the management of secondary schools is vital for the realization of educational goals since they are involved in the implementation of educational policies and programs. This is systematically carried out through a process known as POSCORB meaning Planning, Organizing, Staffing, Controlling, Reporting and Budgeting.

One of the primary functions of the secondary school principals according to Idoko, as cited by Ninikanwa (2014) is management and maintenance of school plant. School plant maintenance means safeguarding and regular repair and supervision of school plant. School plant according to Amanchukwu and Ololube (2015) is described as the site, buildings, equipment and all the essential structures, permanent and semi-permanent as well as machines and laboratory equipment, the blackboards/chalkboard needed for effective teaching and learning. Alimi, Ehinola and Alabi (2012) asserted that school plant are permanent and semi-permanent structures in the school which make up the indispensable systems and structures required by any viable educational institution to function effectively and to achieve the objectives for which it was established. There is no gainsaying that for educational goals and objectives as enshrined in the National Policy of Education to be achieved, facilities which form part of the school plant must be utilized, hence its management and maintenance cannot be downplay on. Therefore, from the forgoing, it is pertinent to state that school plant plays an undisputable role in ensuring and achieving educational goals and objectives hence the need to effectively manage and maintain the school plants comprehensively in other to meet the needs of the teachers and the society.

Statement of the Problem

Management of school plant in secondary schools is an important requirement for the effective implementation of educational program. The school as an institution of learning ought to be provided with adequate plants and learning facilities which include furniture, chalkboards, textbooks, materials, machines, generators, chalks, cars/buses/trucks, computer, typewriter, whiteboard, audio/visual aids, boreholes, toilets, electricity, safety and security facilities among others, as these not only facilitate teaching/ learning but also necessitate smooth running of the school activities and programs. It is for this reason that the Federal Government in her national educational policy stated that school plant is very important in the development of education and emphasized that considerable attention be given to the provision of school plants (Federal Republic Nigeria, 2013).

However, educational facilities or school plants at all levels are at a terrible shape (Asiyai, 2012). Some of the schools are littered with battered structures, worn out facilities/equipment, due to poor maintenance culture. The pathetic situations in Nigerian schools are worsened by the fact that enrolment in schools increases without commensurate expansion of schools or adequate provision of facilities in the schools. The conditions under which students learn in many schools are unhealthy and deplorable; lack of maintenance of the existing school plant, education outcome is adversely affected. Most secondary schools have been in existence for a relatively long period with the same limited classrooms, the same space, library, laboratory, thus have witnessed little or no renovation or maintenance over time.

Today, it is a common phenomenon in secondary schools to see dilapidated buildings, un-kept environment/facilities, blown off / leaky roof, cracked walls, and broken chairs/ desk among others. Most senior secondary schools in Rivers State look like abandoned construction site. This pathetic condition of school plant in some senior secondary schools in Rivers West senatorial district of Rives State has become a major concern to school administrators, students, teachers and the general public because if the situation is not well addressed, the school environment will become unfavorable for effective teaching which will negate the achievement of desired educational goals. Therefore, this study is undertaken to examine the influence of school plant management practices on effective teaching in Senior Secondary Schools in Rivers West Senatorial District in Rivers State.

Purpose of the Study

The purpose of the study is to examine the influence of school plant management practice on effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State. Specifically this study sought to:

1. Examine the influence of school farm management practices on effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State.
2. Examine the influence of school laboratory management practices on effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State.

Research Questions

Two questions were answered to guide the study.

1. How does school farm management practices influences effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State?
2. How does school laboratory management practices influences effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State?

Hypotheses

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

1. There is no significant difference in the mean scores of principals and teachers on how school farm management practices influences effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State.
2. There is no significant difference in the mean scores of principals and teachers on the influence of school laboratory management practices on effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State.

METHODOLOGY

The study adopted the descriptive research survey design. The population of the study consists of all principals and teachers of senior secondary schools in the Rivers West Senatorial District in Rivers State, which is 70 principals and 1,242 teachers. There was no sampling for the principals considering the relatively small and manageable size of the principals' population, while simple random sampling technique was used to select a sample size of 373 teachers which represent 30% of 1242 of teachers' population in the 8 Local Government Areas that make up the senatorial districts. Therefore the sample for the study was 443 respondents (70 principals and 373 teachers). Data for the study were collected with a self-constructed instrument titled "Influence of School Plant Management Practices on Effective Teaching Questionnaire (ISPMPETQ)" which was design after Likert-4 point rating scale. The instrument

was validated by two experts in Educational Management from Rivers State University. A reliability of 0.84 was established for the instrument through Pearson Product Moment Correlation (PPMC). For the analysis of the data, research questions were answered with mean and standard deviation while hypotheses were tested with z-test. Mean values less than 2.50 were rejected while mean values greater than or equal to 2.50 were accepted.

RESULTS AND DISCUSSION OF FINDINGS

Results from the study were presented in the table below.

Research Question 1

How does school farm management practices influences effective teaching in senior secondary schools in Rivers West senatorial district in Rivers State?

Table 1: Mean Response of the Respondents on the Influence of School Farm Management Practices on Effective Teaching

S/N	Items Statement	Principals (N ₁ =70)			Teachers (N ₂ =373)		
		M	S.D	Decision	M	S.D	Decision
1	Ensuring proper inspection and supervision of school farm to detect areas of attention will contribute to effective teaching in senior secondary schools.	3.03	1.53	Accepted	3.67	0.55	Accepted
2	Entrusting Agricultural Science teachers with specific task of taking good care of the school farm, facilities and products will promote effective teaching in senior secondary	3.00	1.00	Accepted	3.21	0.76	Accepted
3	Taking proper inventory of the school farm facilities, produce and equipment will enhance effective teaching.	3.33	0.86	Accepted	2.33	.577	Rejected
4	Appointment of good agricultural student as prefect to be in charge of the school farm will facilitate effective teaching.	2.30	0.52	Rejected	2.41	1.05	Rejected
5	Ensuring that school farm facilities are adequately utilized will promote effective teaching	3.67	0.82	Accepted	2.56	0.75	Accepted
6	Principals to spearhead enlightenment campaigns on proper utilization of school farm.	2.00	0.66	Rejected	2.29	1.02	Rejected
7	The principals to plan activities to raise fund for day to day management of the school farm will promote effective teaching in senior secondary schools.	2.33	0.58	Rejected	3.33	0.57	Accepted
Average Mean/SD		2.81	0.85		2.83	0.75	

Result from Table 1 shows that the respondents accepted that school farm management practices enhances effective teaching in senior secondary schools in Rivers West Senatorial District of Rivers State. This was shown with an average mean of 2.81 and 2.83 which were above the criterion cut-off point of 2.50 for principals and teachers respectively.

Research Question 2

What are the influences of school laboratory management practice on effective teaching in senior secondary schools in Rivers West senatorial district of Rivers State?

Table 2: Mean Response of the Respondents on Influence of School Laboratory Management Practices on Effective Teaching

S/N	Items Statement	Principals (N ₁ =70)			Teachers (N ₂ =373)		
		M	S.D	Decision	M	S.D	Decision
1	Improving the varieties of laboratory equipment and facilities will promote effective teaching in senior secondary schools.	2.67	0.55	Accepted	2.90	0.82	Accepted
2	Improving the standard of seats and benches provided will encourage effective teaching in senior secondary schools.	3.08	1.01	Accepted	2.76	0.66	Accepted
3	Designing the laboratory works to motivate students to study science based subjects with relaxed mind will facilitate effective teaching in senior secondary schools	3.33	0.81	Accepted	3.60	1.04	Accepted
4	The principals' weekly inspection of school laboratory to detect areas of attention will enhance effective teaching.	3.67	0.78	Accepted	3.74	0.77	Accepted
5	Principal asking the cooperate organizations for help in procuring modern laboratory equipment/materials will motivate and facilitate effective teaching	4.11	1.11	Accepted	3.98	0.62	Accepted
6	The Principal, Science teachers and students enlightenment on proper utilization of school laboratory facilities will enhance effective teaching.	2.33	0.52	Rejected	3.33	0.57	Accepted
Average Mean/SD		3.20	0.80		3.39	0.75	

Result from Table 2 shows that the respondents accepted that school laboratory management practices enhances effective teaching in senior secondary schools in Rivers West Senatorial District of Rivers State. This was shown with an average mean of 3.20 and 3.39 which were above the criterion cut-off point of 2.50 for principals and teachers respectively.

Statistical Test of Hypotheses

The following hypotheses guided the study;

Hypothesis 1

There is no significant difference in the mean scores of principals and teachers on how school farm management practices influences effective teaching in senior secondary schools in Rivers West senatorial district of Rivers State.

Table 3: z-Test Analysis on Farm Management Practices on Effective Teaching

Groups	N	Mean	SD	Df	Zcal	Zcrit	Decision
Principals	70	2.81	0.85	441	-1.18	1.960	Accepted
Teachers	373	2.83	0.76				

The result in Table 3 revealed that there is no significant difference in the mean response of principals and teachers on the influence of farm management practices on effective teaching in senior secondary schools in Rivers West senatorial district of Rivers State. Since the calculated value of z (-1.18) is less than the critical value of z (1.960), the null hypothesis of no significant influence was accepted.

Hypothesis 2

There is no significant difference in the mean scores of principals and teachers on the influence of school laboratory management practices on effective teaching in senior secondary schools in Rivers West senatorial district of Rivers State.

Table 4.6: z-Test Analysis on Laboratory Management Practices on Effective Teaching

Groups	N	Mean	SD	df	Zcal	Zcrit	Decision
Principals	70	3.20	0.80	441	-1.82	1.960	Accepted
Teachers	373	3.33	0.75				

The result in Table 4.6 revealed that there is no significant difference in the mean response of principals and teachers on the influence of laboratory management practices on effective teaching in senior secondary schools in Rivers West senatorial district of Rivers State. Since the calculated value of z (-1.82) is less than the critical value of z (1.960), the null hypothesis of no significant influence was accepted.

DISCUSSION OF FINDINGS

Table 1 revealed that school farm management practices influences effective teaching in senior secondary school through the principals’ planning activities to raise fund for day to day management of the school farm, ensuring that school farm facilities are adequately utilized and taken proper inventory of the school farm facilities. This finding is in line with Onwumere, Modebelu and Chukwuka (2016) that school principals rated the school farm as very important in giving students practical experience, promoting agricultural skills by giving the students opportunities to carryout demonstration plots and conduct agricultural experiments among others. Also, the result of the study agrees with Achinine in Ninikanwa (2014) that a well-managed school farm is a great learning resource that fosters the learning of Agricultural science, a source of good food for healthy living and a source of income for the school.

Table 4.2 revealed that school laboratory management practices influences effective teaching in senior secondary school, through designing the laboratory works to motivate students to study science based subjects with relaxed mind which will facilitate effective teaching in senior secondary schools. Principals’ weekly inspection of school laboratory to detect areas of attention to principal, science teachers and students enlightenment on proper utilization of school laboratory facilities among others influences laboratory management practices. This finding substantiate Maduabum in Ninikanwa (2014) who posited that practical work provides opportunities to promote the scientific thought that inculcates into the learner the habits of drawing conclusions based on observation and experimentation.

CONCLUSION

Based on the findings of the study, it was deduced that school farm and school laboratory management practices can only influence effective teaching if proper inspection and supervision is carried out in the school; also to detect areas of attention, taking proper inventory of the school farm facilities, produce and equipment, ensure that improving the varieties of laboratory equipment and facilities, as well as designing the laboratory works will motivate students to study science based subjects. Teaching and learning in senior secondary schools in Rivers West Senatorial District will be effective and enhanced through inculcating management practices of school classrooms and school libraries through principals’ effort in ensuring adequate supply of classroom equipment and facilities as well as improving the provision of modern books, seats, materials and modern technology facilities will enhance effective teaching in senior secondary.

RECOMMENDATION

Based on the findings the following recommendations were made;

1. Principals should ensure effective supervision and inspection of school farms. This will enhance teaching and learning in the secondary schools.
2. Government should provide school laboratory facilities to schools for teaching and learning. The availability of these facilities will increase effectiveness in management of school plant.

REFERENCES

- Adesina, S. & Ogunaju, T. (2011). *Secondary Education in Nigeria*. Ile-Ife University Press.
- Alimi, O. S., Ehinola, G. B. & Alabi, F. O. (2012). School types and academic performance of students in Ondo State, Nigeria. *School Administration and Management*, 1 (1); 19-27.
- Amanchukwu, R .N. & Ololube, N. P. (2015). *Managing School Plant for Effective Service Delivery in Public Secondary Schools in Rivers State of Nigeria*. Retrieved on 30th March 2018, from <https://www.researchgate.net/publication>
- Asiyai, R. I. (2012). Assessing School Facilities in Public Secondary Schools in Delta State, Nigeria. *An International Multidisciplinary Journal, Ethiopia* 6 (2):25;192-205.
- Ninikanwa, L. O. (2014). Effective practices in the management of school plant in secondary schools in Southeast Nigeria. Retrieved on 5th May, 2018, from <http://www.unn.edu.ng/>.
- Federal Republic of Nigeria (2004). National policy on education Abuja: Federal Ministry of Information.
- Onwumere, M., Modebelu, M. N., & Chukwuka, I. E. (2016). Influence of School Farm on Teaching of Agricultural Science in Senior Secondary Schools in Ikwuano Local Government Area, Abia State. *Open Access Library Journal*, 1 (3);1-6.