

# **PRINCIPALS' FACILITATION AND COORDINATION OF SCHOOL PLANT PROVISION AND UTILIZATION FOR QUALITY SECONDARY EDUCATION DELIVERY IN RIVERS STATE**

**By**

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## **Abstract**

The study investigated principals' facilitation and coordination of school plant provision and utilization for quality secondary education delivery in Rivers State, Nigeria. The study which adopted descriptive survey research design was guided by two research questions and two hypotheses. The population of the study consisted of the 245 senior secondary school principals in the 245 public senior secondary schools in the state. A sample of 81 (51 male and 30 female) principals was drawn through stratified random sampling technique from the three senatorial zones in Rivers State. This represented 33% of the entire population. A questionnaire entitled, "Principals Facilitation and Coordination of School Plant Provision and Utilization for Quality Education Delivery Questionnaire (PFCSPUQEDQ) developed by the researchers was used for data collection. The instrument which contained 14 items was properly validated and tested for reliability which stood at 0.88 through Cronbach Alpha Statistics. Mean scores and standard deviations were used to analyse the research questions while t-test or z-test was used to test the hypotheses at 0.05 level of significance. The results of the study showed that, the ways principals facilitate the provision of school plant in their schools among others include: itemizing the needs of the school and forwarding same to schools board or Ministry of Education; mobilizing the school P.T.A. to fill some of the facilities gap and incorporating the facilities need of the school into the annual budget that the principals submit to Schools' Management Board. The ways principals coordinate the utilization of school plant among others include: ensuring that only qualified and experienced people operate school facilities; ensuring that both staff and students are committed to keeping school facilities in good conditions; and designating some staff to supervise the utilization of the various units of school plant. Based on the findings conclusion was drawn and the following recommendation among others were made: principals of public senior secondary schools in Rivers State should be creative, proactive and strategic in expanding their sources of funds for the provision of school plant.

**Keywords:** Secondary Education, School plant, Quality Education, Provision, Utilization and Objectives.

## **Introduction**

Secondary education can simply be defined as the education students receive in secondary schools. This level of education which is in between the primary and tertiary levels of education is very

important in our educational system. It is divided into two segments; the junior secondary school and the senior secondary school. Each segment has a duration of three years. The junior secondary school is

part of the Universal Basic Education (UBE). The UBE which is provided by government is free and compulsory. Graduates of the junior secondary education are expected to proceed to the senior secondary schools. The objectives of senior secondary education in Nigeria include:

- a. Providing graduates of basic education with opportunity for further studies.
- b. Offering diversified curriculum to cater for the differences in talents, disposition, opportunities and future roles
- c. Providing trained manpower in the applied sciences, technology and commerce at sub-professional grades.
- d. Providing entrepreneurial technical and vocational job-specific skills for self reliance and for agricultural, industrial, commercial and economic development.
- e. Develop and promote Nigerian languages, art and culture.
- f. Inspire students with a desire for self improvement and achievement of excellence.
- g. Foster patriotism, national unity and security education with emphasis on the common ties inspite of our diversity and raise morally upright and well adjusted individuals who can think independently and rationally, respect the views and feelings of others and appreciate the dignity of labour.

These secondary education objectives which are well articulated require adequate planning, provision and utilization of school resources especially school plant for the achievement of effective secondary education in Nigeria. Educational planners

are aware of the link between academic performance and physical facilities planning and management. A common assumption here is that a well-planned and managed school plant will facilitate good teaching practice, as well as the understanding and learning rate, cum academic performance or achievement of the students. In other words effective school plant provision and utilization are expected to enhance the attainment of educational goals.

School plant could be seen as all the facilities need for the smooth take-off and sustenance of a school. It describes all the infrastructures and facilities needed by the school for the commencement of academic activities (Kpee, 2013). These infrastructural facilities include: school buildings, ground and gardens, the acres of land which form the site for the school building, the school sign post, the map of the school, the road network, the classrooms, hall, hostels, toilets, urinary, seats, blackboards/chalkboards/marker boards, tables, chairs, dusters, teaching aids/instructional materials, flowers, libraries, books and trees. The school beautification outlay, aesthetic environment, the school fence and designs on it, laboratories, the school farm, chemicals, specimen, all print and non-print materials, farm tools, equipment technical tools, electronics, vehicle etc. the only resource in the school that is not part of the school plant is the human resource.

These school facilities are managed by the school principal. He coordinates the planning, procurement, utilization and maintenance of the school plant. In order

to facilitate high level of teaching and learning activities, there is the need for proper provision and coordination of the utilization of school facilities (school plant). Moreover, school facilities and equipment are not adequate or in good state in most secondary schools in Nigeria, Rivers State inclusive. This makes it necessary for secondary school principals to have a planned management programme in terms of facilitating the provision of school physical facilities and coordinating their utilization.

It is obvious that poor planning of school plant coupled with its inadequacy has negative consequences on teaching learning. It results to poor academic performance of students and it equally discourages teachers from putting in their best in their service delivery. In other words, it will be difficult to realize quality education where the school plant is inadequate and poorly managed. Quality delivery of education implies the achievement of educational goals in line with global, societal expectations and standards (EFf, 2011). Delivery of quality education is only possible where the principals are skillful, innovative and pro-active in the management of school plant. Principals occupy central position in the management of school plant and in the delivery of quality secondary education. It is against this back drop that the researchers decided to investigate how principals facilitate and coordinate the provision and utilization of school plant which is a major part of their responsibility, for quality secondary education delivery in public senior secondary schools in Rivers State.

### **Statement of the Problem**

School plant represents all the physical facilities needed for effective teaching and learning in the school. Most of these facilities are costly and even difficult to come by. High rate of social demand for education caused by rapid population explosion, and economic recession have made it difficult for us to have adequate provision of school plant in most public secondary schools in Rivers State. Quality education to a large extent has been compromised due to inadequate provision of school physical facilities.

In a situation like this, it is expected that appropriate measures should be adopted to provide necessary physical facilities and the utilization of the existing or available ones should be properly coordinated to avoid unnecessary wastage, while quality education delivery is enhanced, therefore, the problem of this study is to investigate principals' facilitation and coordination of school plant provision and utilization for quality secondary education delivery in public senior secondary schools in Rivers State.

### **Purpose of the Study**

The purpose of this study is to investigate how principals facilitate and coordinate the provision and utilization of school plant for quality secondary education delivery in Rivers State. Specifically, the study aim to achieve the following objectives to;

1. determine the ways principals facilitate the provision of school plant for quality secondary education delivery in public senior secondary schools in Rivers State.

2. examine the ways principals coordinate the utilization of school plant for quality secondary education delivery in public senior secondary schools in Rivers State.

### **Research Questions**

The following research questions guided the study:

1. What are the ways male and female principals facilitate the provision of school plant for quality secondary education delivery in Public Senior Secondary Schools in Rivers State?
2. What are the ways male and female principals coordinate the utilization of school plant for quality secondary education delivery in public senior secondary schools in Rivers State?

### **Hypotheses**

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

**H<sub>01</sub>:** There is no significant difference-between the mean scores of male and female principals on the ways they facilitate the provision of school plant for quality education delivery in Public Senior Secondary School in Rivers State.

**H<sub>02</sub>:** There is no significant difference between the mean scores of male and female principal on the ways they coordinate the utilization of school plant for quality education delivery in Public Senior Secondary School in River State.

## **Literature Review**

### **Theoretical Literature Review**

This study was supported with the theory of efficiency and effectiveness of an organization. The theory was propounded by Chester Bernard in 1983, cited in Kpee (2015 p. 33) states that, “the function of the Chief Executive of an organization is to ensure efficiency and effectiveness”. Efficiency and effectiveness of the school relies heavily on the quality and quantity of human and material resource invested into the school as well as the level of prudence employed by the principal in managing them. The theory of efficiency and effectiveness therefore holds that a synergy must exist between the provision/availability of the quantity and quality of school plant and prudential management of all school plant, if the school goals must be adequately achieved and the school will continue to exist. Principals’ management of school plant for quality education delivery entails that principals should be meticulous in the provision maintenance and utilization of available school plant even in the face of their limited supply.

This theory is therefore considered relevant to this study because the management of secondary schools need to conceive and set up efficient and effective school plant management programme in order to enhance quality education delivery in their schools.

### **Conceptual Literature Review**

School plant according to Onwurah cited in Kalagbor (2017) refers to those material resources provided in the school to facilitate teaching and learning operations.

In the school system, these material resources are those school facilities identified, mobilized and utilized to achieve educational goals. School plant according to Abraham (2013) means all the physical facilities and equipment within the school, which are used by members of the school community. They are basic requirements for the establishment of schools. School plant enhances the competence of teachers in the course of instructional delivery as well as the learning ability of the students (Aniebi, 2016).

A good school plant is fundamental to effective implementation of school curriculum and learning takes place better and faster in a school environment with high quality building, accommodation, furniture and equipment than in an environment where these are lacking. School plant management according to Onwurah (2004) is the process of planning to meet the needs of the school for physical facilities. This includes procurement, maintenance and utilization of school physical facilities for effective teaching and learning. School plant provision is inevitable. It is difficult for any meaningful educational activity to take place without adequate provision of school plant. Provision of school plant entails providing school facilities that are required by the school according to the curriculum and population of the school. School principals are required to adopt scale of preference in the provision of school facilities (Kaegon, 2011).

Provision of school plant involves careful planning, thorough study of the things on

ground, identifying the areas of need and cross-matching them with the educational needs and the desires of the host community. According to Onwurah (2004), the following are key considerations in the process of providing school facilities; being aware of modern trends in equipment and instructional materials; setting up a committee made up of administrators, supervisors and teachers with representatives of certain professional bodies like architects and structural engineers; the ministry of education plays a significant role in finding schools alongside aids from host communities and voluntary agencies. The principal should relate with all the relevant agencies and parastatals in the process of planning and providing school plant, those ensured with the responsibility of procuring school facilities should be careful to provide the right quality and quantity; all school plant items should be surveyed and insured; and all school facilities should be itemized and documented in an inventory book for easy identification and inspection.

Utilization of school plant determines the quality of the school products. School facilities should be utilized for the purpose they were acquired for. Utilization of school facilities should be in line with the capacity and other instructions provided by the manufacturers.

Ebong (2006) described utilization of school facilities as activities involving making use of these facilities to achieve desired educational goals. The scholar suggests that utilization of school facilities involves:

- a. The extent students fill the classroom space without much vacancy or whether it is overcrowded.
- b. The extent at which school facilities are being put to use.
- c. The overall usage of school facilities over a time frame.
- d. Whether the facilities are being over used or under used.

Different levels of utilization of school facilities have been recorded. It ranges from no utilization, minimum utilization, utmost utilization, optimal utilization and over utilization (Abdulkareem and Fasasi, 2011). School principals are responsible for the utilization of school plant. They have to delegate authorities and equally supervise compliance to them. The main aim is to preserve and prolong the usefulness of the school facilities. School principals according to Obi (2001) and Mgbodile (1986) play the following roles in the management of school plant for quality education delivery:

1. Provide a favourable environment for learning and adequate care of the school plant.
2. Clearly define the responsibilities of the various personnel on school plant management and equally develop job description for all personnel.
3. Should spell out the supervisory responsibilities and communicate them to the people concerned.

## **Results**

**Research Question 1:** What are the ways male and female principals facilitate the provision of school plant for quality secondary education delivery in public senior secondary schools in Rivers State?

4. Ensures that efficient manpower to operate the school plant at the desired level of service delivery is provided.
5. Should ensure that every school staff recognizes that the physical condition of the school is the symbol of the total curriculum for both the parents and the general public.

## **Methodology**

The study adopted descriptive survey research design. The population of the study consisted of the 245 senior secondary school principals in the 245 public senior secondary schools in Rivers State. Source: Senior Secondary Schools Management Board, Port Harcourt (2018 Report). A sample of 81 principals (51 male and 30 female) was drawn through stratified random sampling technique from the three senatorial zones in Rivers State. This represents 33% of the entire population of the study. A questionnaire titled: "Principals' Facilitation and Coordination of School Plant Provision and Utilization for Quality Education Delivery Questionnaire (PFCSPUQEDQ)" developed by the researchers was used for data collection. The instrument which contained 14 items was properly validated and a reliability index of 0.88 was established through Cronbach Alpha statistics, mean scores and standard deviation were used to answer the research questions while z-test was used to test the hypotheses at 0.05 level of significance.

**Table 1: Mean scores and standard deviation response of male and female principals on the ways they facilitate the provision of school plant for quality education delivery.**

S/N	Items	Male Principals N = 51		Decision	Female Principals N = 30		Decision	Mean Sets $\frac{X_1 + X_2}{2}$	Overall Decision
	Ways principals facilitate the provision of school plant for quality secondary education development.	$\bar{X}_1$	$SD_1$		$\bar{X}_2$	$SD_2$			
1.	Itemizing the needs of the school and forwarding same to schools board or Ministry of Education.	2.98	0.86	Agree	2.90	1.06	Agree	2.94	Agree
2.	Mobilizing the school PTA to fill some of the facilities gap experienced by the school.	3.17	0.71	Agree	2.90	0.99	Agree	3.04	Agree
3.	Levyng the students some amount of money in order to raise fund for the procurement of school plant.	2.76	0.84	Agree	2.53	1.04	Agree	2.65	Agree
4.	Principals appeal to well meaning individuals from the school's host community to donate needed facilities to the school.	2.80	0.92	Agree	2.93	0.78	Agree	2.87	Agree
5.	Organizing various inter and intra school competitions where government agencies, companies within the locality and philanthropists are invited to support the school.	2.67	1.13	Agree	3.03	1.13	Agree	2.85	Agree
6.	Incorporating the facilities need of the school in the annual budget that the principal sends to Senior Secondary Schools Management Board.	2.96	1.02	Agree	3.23	0.97	Agree	3.10	Agree
7.	Undermining the quality of equipment/facilities provided for the school.	1.67	0.89	Disagree	1.83	0.87	Disagree	1.75	Disagree
	<b>Aggregate mean and standard deviation</b>	<b>19.01</b>	<b>5.88</b>	<b>Agree</b>	<b>19.37</b>	<b>6.45</b>	<b>Agree</b>	<b>19.20</b>	<b>Agree</b>
		<b>(2.72)</b>	<b>(0.84)</b>		<b>(2.77)</b>	<b>(0.92)</b>		<b>(2.74)</b>	

Table 1 showed that items 1 to 6 had mean scores that are greater than the criterion mean of 2.50 on both the male and female principals' columns. They were accepted by both respondents as the ways principals facilitate the provision of school plant for quality secondary education delivery in public senior secondary schools in Rivers State. On the contrary, item number 7 had mean scores that are less than the criterion mean and it was rejected by both respondents as part of the ways principals facilitate the provision of school plant for quality secondary education delivery.

The aggregate mean scores of 2.72 and 2.77 for the male and female principals respectively as well as the aggregate mean set score of 2.74 showed that both categories of principals have a common perception of the ways they facilitate the

provision of school plant for quality secondary education delivery. The ways principals facilitate the provision of school plant for quality secondary education deliver therefore includes the following: itemizing the needs of the school and forwarding same to schools board or Ministry of Education; mobilizing the school P.T.A to fill some facilities gap; levying the students to raise fund for the procurement of school plant; appealing to well meaning individuals from the host community to donate needed facilities to the school; organizing various inter and intra school competitions where government agencies support the school; and incorporating the facilities needs of the school in the annual budget that the principal submits to Senior Secondary Schools' Management Board.

**Research Question 2:** What are the ways male and female principals coordinate the utilization of school plant for quality secondary education delivery in public senior secondary schools in Rivers State?

**Table 2: Mean scores and standard deviation of the response of male and female principals on the ways principals coordinate the utilization of school plant for quality secondary education delivery.**

S/N	Items	Male Principals N = 51		Decision	Female Principals N = 30		Decision	Mean Sets $\frac{X_1 + X_2}{2}$	Overall Decision
		$\bar{X}_1$	$SD_1$		$\bar{X}_2$	$SD_2$			
8.	Ensuring that only qualified and experienced people operate school facilities.	2.69	1.16	Agree	2.73	1.14	Agree	2.71	Agree
9.	Ensuring that school facilities are not over or under utilized.	2.63	1.11	Agree	2.70	0.99	Agree	2.67	Agree
10.	Ensuring that proper records of every school facility is maintained.	2.63	1.13	Agree	2.90	0.88	Agree	2.77	Agree
11.	Ensuring that enrolment in	2.61	0.92	Agree	2.77	0.94	Agree	2.69	Agree



	the school is at the same pace with available facilities.									
12.	Ensuring that both staff and students are committed to keeping school facilities in good conditions.	2.80	1.02	Agree	2.97	0.89	Agree	2.89	Agree	
13.	Ensuring that the utilization of school facilities is not abused by staff and students.	2.90	0.92	Agree	2.87	0.90	Agree	2.89	Agree	
14.	Designating some staff to supervise the utilization of the various units of school plant.	3.00	0.08	Agree	2.90	1.06	Agree	2.95	Agree	
<b>Aggregate mean and standard deviation</b>		<b>19.25 (2.75)</b>	<b>6.78 (0.96)</b>	<b>Agree</b>	<b>19.83 (2.83)</b>	<b>6.53 (0.93)</b>	<b>Agree</b>	<b>19.57 (2.80)</b>	<b>Agree</b>	

Table 2 showed that, all the items (8 to 14) had mean scores that are greater than the criterion mean of 2.50. They were accepted as the ways principals coordinate the utilization of school plant for quality secondary education delivery in public senior secondary schools in Rivers State.

The aggregate mean of 2.75 and 2.83 for male and female principals respectively and the aggregate mean set of 2.80 indicated that both classes of principals shared a common opinion on ways principals coordinate the utilization of school plant for quality secondary education delivery in public senior secondary schools in Rivers State. The ways principals coordinate the utilization

of school plant for quality secondary education delivery therefore includes the following: ensuring that only qualified and experienced people operate school facilities; ensuring that school facilities are not over or under utilized; ensuring that proper records of every school facility is maintained; ensuring that enrolment in the school is at the same pace with available facilities; ensuring that both staff and students are committed to keeping school facilities in good conditions; ensuring that the utilization of school facilities is not abused by staff and students; and designating some staff to supervise the utilization of the various units of school plant.

### **Test of Hypotheses**

**H<sub>01</sub>:** There is no significant difference between the mean scores of male and female principals on the ways they facilitate the provision of school plant for quality education delivery in public senior secondary schools in River State.

**Table 3: Independent t-test of difference between the mean scores of male and female principals on the ways they facilitate the provision of school plant for quality education delivery**

Gender	N	$\bar{X}$	Std Dev.	Df	t	Sig (2-tailed)	Decision
Male	51	2.72	0.84	79	-.248	.805	Ho <sub>1</sub> Accepted
Female	30	2.77	0.92				

Table 3 indicated  $t(79) = -248$ ,  $p = .805 > 0.05$ . This showed that no significant difference existed between the mean scores of male and female principals with regards to the ways they facilitate the

provision of school plant for quality education delivery in public senior secondary schools in Rivers State. The null hypothesis was therefore accepted.

**Ho<sub>2</sub>:** There is no significant difference between the mean scores of male and female principals on the ways they coordinate the utilization of school plant for quality education delivery in public senior secondary schools in Rivers State.

**Table 4: Independent t-test of difference between the mean scores of male and female principals on the ways they coordinate the utilization of school plant for quality education delivery**

Gender	N	$\bar{X}$	Std Dev.	Df	t	Sig (2-tailed)	Decision
Male	51	2.75	0.97	79	-.376	.798	Ho <sub>2</sub> Accepted
Female	30	2.83	0.93				

Table 4 showed that,  $t(79) = -.376$ ,  $p = .798 > 0.05$ . This revealed that no significant difference existed between the mean scores of male and female principals on the ways they coordinate the utilization of school plant for quality education delivery in public senior secondary schools in Rivers State. The null hypothesis was therefore accepted.

### Discussion of Findings

The study has revealed the various ways principals facilitate the provision of school plant. These steps are in the right direction.

It is no longer news that government cannot adequately fund education alone. They need the support of parents, corporate organizations, communities and all the stakeholders in the educational system. These bodies compliment the efforts of government in the provision of school facilities in the areas of building/classroom blocks, science laboratory equipment, books/library facilities, computers, chairs/tables, construction of boreholes for water supply

etc. These things are necessary because the right type of atmosphere required for effective teaching and learning is that consisting of better teaching facilities (Udoh & Akpan, 1987). Also supporting this is the fact that quality of education received by our children has direct bearing to the availability or lack of physical facilities and the overall atmosphere where teaching and learning take place.

Providing school plant required by the school according to the enrolment strength and curriculum is not an easy task. It demands for careful planning and assessment of the needs of the society (Kaegon, 2011). School principals have very crucial roles to play in facilitating the provisions of school plant for quality education delivery in their schools. They need to take a careful study of what is on ground, indentifying the areas of need and cross matching them with the educational needs and the desires of the society. Principals, as public relations officer interface with different bodies, people and Ministry of Education. He/she relates the school plant needs to them. He/she also incorporates the school facilities needs in the school's annual budget. This practice is very important and this will enable appropriate allocation of fund to be made in this regard. Itemizing the needs of the school will help principals to be focused and aware of what they should be asking for. In doing this, they should adopt scale of preference order (Kaegon, 2011). This will help parents (PTA) and other organizations to identify where they can come to assist the school.

The study equally revealed the ways principals coordinate the utilization of school plant for quality secondary education delivery in their schools. Providing school plant costs a lot of money. Moreover, replacement of school plant is not easy because funds are not adequately available for that. It is therefore necessary for principals to ensure that available school plants are handled with care. The technical equipment should be operated by well trained and experienced personnel. This to an extent will guarantee their durability and proper functioning. It is also very important to utilize these facilities according to the manual instructions from their manufacturers.

Enrolment in secondary schools has increased due to free basic education in the country; this has resulted to over utilization of available school facilities. Over utilization reduces the life span and it equally increases the cost of maintenance. It is therefore necessary to keep enrolment pace within the capacity of the available school facilities. Over utilization of school facilities increases wear and tear, thus reducing their life span (Ezeoti, 2005). Also maintenance of proper record of school facilities is very essential. This makes handing over of school facilities from one authority to another very easy. It is also helpful in dictating missing of school items, school facilities that are available and those that are lacking.

Staff and students should be committed to proper maintenance of school plant because both of them directly benefit from school plant (Nwideeduh & Adieme,

2017). School principals are required to designate some qualified and experienced members of staff to monitor and supervise the utilization of the various units of school plant. This will guide against any form of abuse in the utilization of school plant by staff, students and members of the host communities. According to Ogbilikana (2016), government, staff and students show negative attitude towards the utilization and maintenance of school plant and other public properties, hence people should be appointed to supervise the utilization of school facilities.

### Conclusion

Facilitating the provision of school plant and coordinating their effective utilization are very important roles played by school principals in order to promote quality education delivery in their schools. This study has observed the various ways principals in public senior secondary schools in Rivers state facilitate the provision of school plant and also coordinate their utilization for quality education delivery. Adequate provision of school plant and their effective utilization will enhance the competence of teachers and the learning ability of the students, which to a large extent influence the quality of the school products. It is therefore concluded that principals should be very proactive and pragmatic in planning for school plant provision and in coordinating their utilization for quality education delivery in their schools.

### Recommendations

Based on the findings, the following recommendations were made:

1. Principals of public senior secondary schools in Rivers State should be creative, proactive and strategic in expanding their sources of funds for the provision of school plant.
2. School principals as role models should endeavor, to acquire skills and leadership character that will facilitate the commitment of every member of the school community to value, preserve, protect and promote effective utilization of school plant.

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