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Abstract

The study focused on equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo state, Nigeria. Three research questions and three hypotheses guided the study. The study adopted the descriptive research design. The population of the study comprised 597 secondary schools in Imo State with 3.154 teaching staff as the respondents. The sample size of the respondents was 824 representing 26.1% of the population drawn using proportionate stratified random sampling techniques. An instrument titled "Equitable Distribution of School Facilities for Effective Teaching and Learning Questionnaire (EDSFETLQ)" structured by the researchers and validated by experts with reliability co-efficient of 0.82 determined with Cronbach Alpha was used for data generation. Mean and standard deviation were used in answering research questions while z-test statistics was used to test the hypotheses at 0.05 alpha level. The study revealed among others that the criteria used by government in the distribution of school facilities for teaching and learning are not fair and favourable for goals' attainment of secondary schools in the State. It was recommended among others that the government should disengage on the criteria on board to ensure equitable distribution of facilities to schools.

Keywords: Equitable Distribution, School Facilities, Effective Teaching and Learning, Secondary Education

Introduction

Education is the vital tool for social and technological change of any nation. It is recognized as a critical factor for sustainable development. Education widens the horizons of the beneficiaries by giving them the capacity to empathize with new human situations and by preparing them to share in innovative activities. Madu and Kaegon (2018) surmised that education is a catalyst that enables a nation to remain competitive in the global economy. Education equips the beneficiaries for contribution towards nation building, socio-cultural, political and economic growth. Education is one of the most important needs of every individual which ensures the

welfare of the individual and development of the society. Secondary education contributes significantly in achieving this goal.

Secondary education is the second rung of education which follows immediately after primary education. It is referred to as post primary education. According to Federal Republic of Nigeria (2014), secondary education is the education children receive after primary education and before the tertiary stage. Apart from serving as the link between primary and tertiary education, it provides opportunity for a child to acquire additional knowledge, skills, and traits beyond the primary level (Kaegon & Madu, 2017). More so, the performance at this level is of significant importance for smooth entry into higher education and into work place for those whose terminal point in education will be secondary level. It is a ripe age for developing students' potentials. Secondary education is therefore crucial to the education of a child. Hence, effective teaching and learning is critical at this stage.

Teaching and learning is at the core of education. Teaching and learning is a process in the school system through which teachers ensure that learners acquire educational values in order to live a meaningful and fulfilled life in the society (Madu, 2020). The teaching-learning process is said to be effective if it produces the gains of education in students. In line with the above assertion, Lorin (2004) quipped that effective teaching is one that produces demonstrable results in terms of the cognitive and affective development of the students and hence it is an important component in every teaching professional. Effective teaching and learning enables students to reach desired outcomes, which may include the attainment of specific learning objectives as well as broader goals such as being able to solve problems, think critically, work collaboratively and become effective citizens. One of the crucial factors that guarantee effective teaching and learning is school facilities.

School facilities are regarded as educational tools. School facilities are the material resources provided for staff and students to optimize their productivity in the teaching and learning process (Asiabaka, 2008). School facilities constitute essential inputs meant to create favourable learning environment, facilitate interaction and enhance achievement of educational objectives. Amanchukwu and Nwachukwu (2015) gave a comprehensive list of school facilities as all types of buildings for academic and non- academic functions, areas for sports and games, landscape, farms, toilets, furniture, lightening, information and communication technology, food services and special facilities for physically challenged. The facilities ensure the safety and comfort of the students and staff, and the attainment of the curricular and co-curricular activities carried out in the school. One way of achieving these goals is through equitable distribution.

Equitable distribution in this study is distinct from the definition of simple equity, which has to do with being fair and impartial. Equitable distribution of school facilities here refers to allocation of facilities to all schools, independent of their

location. As a principle, Adiele, Obasi and Ohia (2017) averred that equitable distribution advocates equitability in the distribution of and accessibility to all provided learning resources no matter where the school is located. Equitable distribution ensures that school facilities are appropriately channelled to areas where they are required in the right quality and quantity to avoid over or under utilization which amounts to wastage. This view was corroborated by Nnabuo (1997) who noted that inequitable distribution of school facilities results in either under-utilization or over-utilization which does not enhance effective teaching and learning. When there is equitable distribution of facilities, this guarantees effective operation and maintenance of standard in the school systems. Equitable distribution of educational facilities therefore cannot be overemphasized. Based on the above scenario, the study focused on equitable distribution of school facilities for effective teaching and learning and learning and learning at secondary education.

Statement of the Problem

Effective teaching and learning is a catalyst to the achievement of education goals. It enables students to reach desired outcomes, which may include the attainment of specific learning objectives as well as broader goals such as being able to solve problems, think critically, work collaboratively and become effective citizens. School facilities are very vital for effective teaching and learning, and as such play important role in the realization of education goals. They are essential in providing an appropriate atmosphere to maximize learning. However, it has been observed by the researcher that school facilities are not equitably distributed among the schools in Imo State. When public facility such as the educational facility isinequitably distributed in a region, there is every tendency that such facility to be underutilized or otherwise, and thepeople to be serviced becomes disadvantaged in the use of such facility. Any school with inadequate facilities will equally lack behind in the race to actualizing the main goal of education. These observations are what bothered the researchers.

Purpose of the Study

The purpose of this study was to determine the following:

1. The criteria used by government in the distribution of school facilities for teaching and learning in secondary schools in Imo State, Nigeria.

2. The factors that hinder the equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

3. The planning strategies that could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Research Questions

The following research questions were posed to guide the study:

1. What are the criteria used by government in the distribution of school facilities for teaching and learning in secondary schools in Imo State, Nigeria?

2. What factors hinder the equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria?

3. What planning strategies could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria?

Hypotheses

The following hypotheses were tested at 0.05 alpha level:

1. There is no significant difference between principals and teachers with respect to the criteria used by government in the distribution of school facilities for teaching and learning in secondary schools in Imo State, Nigeria.

2. There is no significant difference between principals and teachers with respect to the factors that hinder the equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

3. There is no significant difference between principals and teachers with respect to the planning strategies that could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Literature Review

School facilities are significant in effective teaching and learning. Sequel to its significance in the teaching-learning process, it is meant to be provided as well as distributed to all schools by the government. Researchers have investigated on the criteria used in the provision and distribution of school facilities. In his study, Ejikeme (2000) found the size of the school, the age of the school as well as favouritism by staff of commission as the criteria which guide the officials of Anambra State Education Commissioning the distribution of physical facilities and equipment in secondary schools. Okafor (2003) found the population of teachers, performance of students, size and site of the school as the criteria for distributing school plant in Idemili North Local Governmen Education Area. The study of Eyenghe, Ibama and Wocha (2015) revealed that the criteria used by the government for the distribution of facilities and services in Obio/Akpor and Port Harcourt Local Government Areas is not fair and favourable to the residents/populace.

There are factors that hinder equitable distribution of school facilities. In a study on the provision and utilization of facilities in secondary schools in Imo State carried out by Ojiri (2017), it was found that the problems inhibiting adequate

provision of educational facilities in secondary schools in Imo State include: inadequate fund, lack of skilled manpower, improper planning for facilities procurement in schools, politicization of facilities allocation to schools, unstable government and frequent change in policies, poor supervision and lack of adequate data of the schools. Ochai and Olatunde (2015) on a study on politics of public secondary school mapping and facilities provision found school administrators lobbying government for infrastructural provision, favouritism by staff of commission in the allocation of facilities, religion and ethnicity as determining factors for the provision of facilities to public secondary school. Nwadiani (2016) echoed that it is unfortunate that in Nigeria, the mapping and citing of schools are left to the whims and caprices of officers of compromise cum mean integrity to manage.

Equitable distribution and utilization of educational resources is within the sphere of planning. Planningis the antecedent for quality educational development. It involves the establishment of objectives, strategies to achieve the objectives and procedures of determination of the activities and resources necessary to achieve them. Any efficient and effective system must involve proper planning strategies to survive. In the case of this study, the planning strategies are necessary because it will unveil the necessary materials and proportion needed to achieve educational goals in schools.Nwadiani (2002) lays emphasis on systematic planning which is important to guide educational expansion why adequately considering the availability and effective distribution of facilities equipment, funds and personnel. Green, Breetzke and Argue (2008) stressed that achieving equitability is possible only if the areas that are under or overprovided are identified and corrective action is applied through appropriate planning and implementation. Okoroma and Envoghasim (2012) stated that the distribution of educational resources to reflect institutional needs is an important factor that determines the achievement of educational goals. It is only through effective planning that wastage of resources and avoidable mistakes can be checked.

Methodology

The descriptive survey research design was adopted for the study. The population of the study comprised 597 secondary schools in Imo State with *3,154 teaching staff as the respondents*. The sample size of the respondents was 824 representing 26.1% of the population drawn using proportionate stratified random sampling techniques. An instrument titled "Equitable Distribution of School Facilities for Effective Teaching and Learning Questionnaire (EDSFETLQ)" structured by the researchers and validated by experts with reliability co-efficient of 0.82 determined with Cronbach Alpha was used for data generation. Mean and standard deviation were used to answer the research questions while z-test statistics was used to test the hypotheses at 0.05 alpha level. An item with a calculated mean

value equal or greater than 2.50 was accepted while an item with the calculated mean value less than or equal to 2.49 was rejected.

Results

Research Question One: What are the criteria used by government in the distribution of school facilities for teaching and learning in secondary schools in Imo State, Nigeria?

 Table 1: The Mean Values and Standard Deviations on the Criteria used by Government in the Distribution of School Facilities for Teaching and Learning in Secondary Schools in Imo State, Nigeria

S/N	Items: Criteria used by Government	$\overline{\mathbf{X}}$	SD	Decision
1	Size of the school	3.10	0.56	Agreed
2	Age of the school	3.03	0.64	Agreed
3	Population of teachers	3.01	0.68	Agreed
4	Performance of students	3.12	0.53	Agreed
5	Site of the school	3.16	0.51	Agreed

Table 1 reveals that all the items have mean values above the criterion mean of 2.50. The data showed that all the items are criteria used by government in the distribution of school facilities for teaching and learning in secondary schools in Imo State, Nigeria.

Research Question Two: What factors hinder the equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Table 2: The Mean Scores and Standard Deviations on the Factors that hinder the EquitableDistribution of School Facilities for Effective Teaching and Learning in Secondary Schoolsin Imo State, Nigeria

S/N	Items: Factors Variables	$\overline{\mathbf{X}}$	SD	Decision
6	Non-conformity with planning standards.	3.06	0.57	Agreed
7	Lack of policies for facilities provision and			
	distribution in schools.	3.00	0.59	Agreed
8	Politicization of facilities allocation to schools.	2.87	0.71	Agreed
9	Favouritism by staff of commission in the			
	allocation of facilities.	3.14	0.45	Agreed
10	Administrators lobbying government for			-
	infrastructural provision.	2.86	0.79	Agreed
11	Religious and ethnic affiliation of political			C
	leaders.	2.91	0.64	Agreed

Table 2 shows that all the items have mean scores above the criterion mean of 2.50. The data indicated that all the items are the factors hindering the equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Research Question Three:What planning strategies could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria?

Table 3: The Mean Ratings and Standard Deviations on the Planning Strategies that could enhance Equitable Distribution of School Facilities for Effective Teaching and Learning in Secondary Schools in Imo State, Nigeria.

S/N	Items: Planning Strategies Variables	$\overline{\mathbf{X}}$	SD	Decision
12	Distribution of facilities based on areas of need.	3.10	0.47	Agreed
13	Distribution of facilities based on enrolment rate.	3.09	0.49	Agreed
14	Distribution of facilities based on population			
	figures.	3.08	0.59	Agreed
15	Distribution of facilities based on local needs.	3.01	0.58	Agreed
16	Distribution of facilities based on disadvantaged			
	areas.	3.05	0.52	Agreed

Table 3 indicates that all the items have mean ratings above the criterion mean of 2.50. The data revealed that all the items are the planning strategies that could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Hypothesis One: There is no significant difference between principals and teachers with respect to the criteria used by government in the distribution of school facilities for teaching and learning in secondary schools in Imo State, Nigeria.

Table 4: z -test Analysis of Difference between Principals and Teachers with respect to the Criteria used by Government in the Distribution of School Facilities for Teaching and Learning in Secondary Schools in Imo State, Nigeria.

Respondents	Ν	X	SD	df	Z-cal	Z-crit	Decision
Principals	240	3.04	0.65	8.22	1.37	1.96	Accepted
Teachers	584	3.12	0.51				

Table 4 indicates that at 0.05 alpha level and 822 degrees of freedom, the calculated z-value of 1.37 is less than the critical z-value of 1.96. Since the calculated z-value of 1.37 is less than the critical z-value of 1.96, the study failed to reject the null hypothesis. On this regard, there is no significant difference betweenprincipals and teachers with respect to the criteria used by government in the distribution of school facilities for teaching and learning in secondary schools in Imo State, Nigeria.

Hypothesis Two: There is no significant difference between principals and teachers with respect to the factors that hinder the equitable distribution of school facilities for

effective teaching and learning in secondary schools in Imo State, Nigeria. Table 5: z -test Analysis of Difference between Principals and Teachers with respect to the Factors that hinder the Equitable Distribution of School Facilities for Effective Teaching and Learning in Secondary Schools in Imo State, Nigeria.

Respondents	N	x	SD	df	Z-cal	Z-crit	Decision
Principals	240	2.94	0.66	822	0.98	1.96	Accepted
Teachers	584	3.00	0.59				

Table 5 shows that at 0.05 alpha level and 822 degrees of freedom, the calculated z-value of 0.98 is less than the critical z-value of 1.96. Since the calculated z-value of 0.98 is less than the critical z-value of 1.96, the study retained the null hypothesis. Therefore, there is no significant difference between principals and teachers with respect to the factors that hinder the equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Hypothesis Three: There is no significant difference between principals and teachers with respect to the planning strategies that could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Table 6: z -test Analysis of Difference betweenPrincipals and Teachers with respect to thePlanning Strategies that could enhance Equitable Distribution of School Facilities forEffective Teaching and Learning in Secondary Schools in Imo State, Nigeria.

Respondents	N	$\overline{\mathbf{X}}$	SD	df	Z-cal	Z-crit	Decision
Principals	240	3.03	0.56	822	1.24	1.96	Accepted
Teachers	584	3.10	0.50				

Table 6 reveals that at 0.05 alpha level and 822 degrees of freedom, the calculated z-value of 1.24 is less than the critical z-value of 1.96. Since the calculated z-value of 01.24 is less than the critical z-value of 1.96, the study upheld the null hypothesis. Based on the above, there is no significant difference betweenprincipals and teachers with respect to the planning strategies that could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools in Imo State, Nigeria.

Discussion of Findings

The first finding of the study is that the criteria used by government in the distribution of school facilities for teaching and learning in secondary schools include: size of the

school, age of the school, population of teachers, performance of students and site of the school. The finding implies that the criteria used by government in the distribution of school facilities for teaching and learning are not fair and favourable for goals' attainment of secondary schools in the state. The finding is in line with some of the findings of Ejikeme (2000) which revealed *t*he sizeof the school and the age of the school as the criteria used in the distribution of physical facilities and equipment in secondary schools. *The finding is also in line with* Okafor (2003) who found *t*he population of teachers, performance of students, size and site of the school as the criteria for distributing school plant in the study area. The finding is in tandem with the study of Eyenghe Tari, Ibama Brown, Wocha Chikagbum (2015) which revealed that the criteria used by the government for the distribution of facilities and services in the area is not fair and favourable to the residents/populace of Obio/Akpor and Port Harcourt Local Government Areas.

Secondly, the finding of the study indicated that non-conformity with planning standards, lack of policies for facilities provision and distribution in schools, politicization of facilities allocation to schools, favouritism by staff of commission in the allocation of facilities, administrators lobbying government for infrastructural provision, religious and ethnic affiliation of the political leaders are the factors hindering the equitable distribution of school facilities for effective teaching and learning in secondary schools. The finding complements the findings of Ojiri (2017) which showed inadequate fund, lack of skilled manpower, improper planning for facilities procurement in schools, politicization of facilities allocation to schools, unstable government and frequent change in policies, poor supervision and lack of adequate data of the schools as the problems inhibiting adequate provision of educational facilities in secondary schools in Imo State. The result is consistent with the finding of Ochai and Olatunde (2015). The finding lays credence to Nwadiani (2016) who echoed that it is unfortunate that in Nigeria, the mapping and citing of schools are left to the whims and caprices of officers of compromise cum mean integrity to manage.

The third finding of the study ascertained the planning strategies that could enhance equitable distribution of school facilities for effective teaching and learning in secondary schools to include: distribution of facilities based on areas of need, enrolment rate, population figures, local needs and disadvantaged areas. The finding lays credence to Okoroma and Enyoghasim (2012) who stated that the distribution of educational resources to reflect institutional needs is an important factor that determines the achievement of educational goals Nwadiani (2002) lays emphasis on systematic planning which is important to guide educational expansion why adequately considering the availability and effective distribution of facilities equipment, funds and personnel. The finding supports Green, Breetzke & Argue (2008) who stressed that achieving equitability is possible only if the areas that are under or overprovided are identified and corrective action is applied through

appropriate planning and implementation. Therefore, the equitable distribution of facilities in schools can be achieved through good planning.

Conclusion

Based on the findings, it was concluded that the criteria used by government in the distribution of school facilities are not fair and favourable, there are an array of factors that hinder equitable distribution of facilities and there are planning strategies that could enhance equitable distribution of facilities.

Recommendations

In the light of the findings, the study recommended the following:

- The government should disengage on the criteria on board to ensure equitable distribution of facilities to schools.
- There should be systemic change based on best practices with regard to the distribution of facilities to ensure an equitable outcome by the government and relevant bodies.
- The government should develop equity policies on facilities distribution to leverage the planning strategies to more equitably distribute facilities.

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