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Abstract

The poor and devastating state of physical resources in secondary schools in Anambra State which seem to hinder teachers' proficiency and students' learning has warranted the present study. Given the importance of physical resources for schools effectiveness, this study however examined administrators' application of physical resources management strategies for secondary schools effectiveness in Anambra State. Four research questions guided the study. A descriptive survey research design was employed in the study. Population of the study constituted 259 principals from the 259 public secondary schools located within 6 education zones in Anambra State. Sample size of the study comprised 130 principals from 130 public secondary schools, selected out of the entire principals' population at 10% (percent) using stratified random sampling technique. A 24-item questionnaire titled "Administrators' Application of Physical Resources Management Strategies for Secondary Schools Effectiveness Questionnaire (AAPRMSSSEQ)" developed by the researchers served as instrument for data collection. The research instrument was validated by three experts and reliability of the instrument established through a pilot-test. Data collated were analyzed using mean scores and standard deviation. Findings of the study revealed that the secondary school administrators' did not effectively apply the various physical resources management strategies that is; the routine, emergency, preventive and corrective management strategies. Among the recommendations proffered from the findings of the study are that the Anambra State Government and Post Primary Schools Service Commission (PPSSC) should encourage administrators application of physical resources management strategies for secondary schools effectiveness in Anambra State through adequate funding, supervision and retraining programmes.

Keywords: Administrators, Application, Physical, Resources, Management, Strategies, Secondary schools, Effectiveness

Introduction

Education is crucial for sustainable development in the Nigerian society. It is an instrument 'par excellence' for social transformation and national reconstruction in the country. Education is also an instrument for human empowerment and development. Secondary education as part of the Nigerian education according to the Federal Republic of Nigeria (FRN, 2013) is given to children after primary or basic education and prepares students for higher education. It further prepares students for the world of work, wealth creation and entrepreneurship. Secondary education have been set up with several objectives which has equally been highlighted by the Federal Republic of Nigeria (FRN, 2013) under section 3 of the National Policy on Education. For any education system such as secondary education to remain very effective and functional to its recipients or clients in order to achieve its educational goals, there is need to provide all the necessary resources for attainment of positive results and outcomes. Ezeugbor and Okorji (2014) asserted that education which includes secondary education, is indeed becoming a very big business in Nigeria and this business aspect of providing adequate resources, particularly buildings, should now become a serious element for effective management of secondary education. Resources are therefore, the vital organs of effective and efficient functional education. Hence, the success of every educational system depends on the quality and quantity of its factors of productionhuman and physical resources (Ezeugbor & Okorji, 2014). Egbuchiwe (2018) opined that there is no way the goals and objectives of an educational institution can be achieved without putting in place certain mechanisms towards ensuring the success of such institution. Therefore, putting in place adequate resources together with enforcement of effective management strategies is a pre-requisite towards actualization of educational goals and objectives. Resources are very essential in the teaching and learning situation of any education system like secondary education (Egbuchiwe, 2018). Nwaham (2011) described resources in education as things found within the school environment which are used to support teaching and learning. Without the resources, the goals of the school cannot be accomplished. They are made up of both human and material resources. Human resources refers to group of workers or individuals in the school such as the skilled and unskilled workers, teachers, supervisors, managers and administrators.

The materials resources which includes both the financial and physical resources (Egbuchiwe, 2018) are equally used to compliment the human resources, likewise promote teaching and learning effectiveness in the school. The physical resources which is the main thrust and focus of this present study as observed by Egbuchiwe (2018) and Nwaham (2011) includes the school facilities, instructional materials or teaching aids, equipment, building, information and communication technology (ICT) tools, among others. Uchendu, Ekanem and Jonah (2013) defined

the physical resources as the movable and immovable properties, physical structures and assets belonging or allocated to an educational institution to enhance teachinglearning process and educational services. Akinfolarin (2017), Usman (2016) and Uko (2015) opined that the school physical resources include the structure, the machines, raw materials, vehicles, school records, sports facilities, instructional materials and other tools, which can facilitate organizations activities and processes. The physical resources may not be the same in all organization. In educational system, the physical resources would include the classrooms/lecture rooms, staff offices, vehicles, health centers, library, land, buildings, equipment, laboratory and workshop, services and so on, which directly or indirectly contribute to the achievement of goals. These physical resources which should not be toiled in the school, however, form the hub on which quality education can be enhanced. They success and productivity of workers and the schools effectiveness depends largely on the proper utilization and management of the physical resources (Nwaham, 2011). However, school effectiveness can be referred to as how the school accomplishes its objectives. It can also be regarded as a distinct characteristic of an effective school.Effectiveness on the other hand, means an organisation accomplishing its specific objectives (Botha, 2010). Given the importance and relevance of the physical resources for secondary schools effectiveness including those in Anambra State, Nwaham (2011) opined that the physical resources of the school should be properly managed, coordinated and controlled for school's effectiveness. In the secondary schools in Anambra State, it is the responsibility of the school administrator, who is also known the principal, to ensure that the physical resources are available, utilized and well-managed in the school. Usman (2016) asserted that the administrators of institutions have role to play in ensuring effectiveness and efficiency within and outside the institution, not only in the procurement or acquisition of resources but also in their organization, coordination, control and maintenance.

The school administrator as defined by Akpakwu (2012) and Chike-Okoli (2007) is the administrative head, chief custodian and one who is at the peak position and helm of affairs, who oversees the day-to-day activities of the secondary school. Being the leader in the school organization, the principal, controls and manages both the human and material resources in the school. He or she makes sure that all the physical resources are intact for the smooth administration of all aspects of the school's operation and accomplishment of goals in the school organization. One of the important functions or responsibilities of the principal as the administrator of the school among others, is school plant or physical resources management functions, where the principal is expected to manage the available school physical resources in order to support and improve teachers' job performances, for school's effectiveness (McHenry, 2009; Akpakwu, 2012). The administrator also evaluates the effectiveness and efficiency of the school in utilizing the available physical resources to achieve maximum result thereby stimulating productivity and reducing wastages.

With all the above statement, it is important that the secondary school principals or administrators deploy and apply effective management strategies while coordinating the physical resources of the school (Usman, 2016).

Management entails the mobilization, coordination, application, allocation and utilization of both the human and material resources for achievement of educational goals and objectives. Management involves functions such as planning, coordinating, organizing, budgeting, staffing, reporting and documentation, among others (Akpakwu, 2012; Igbinedion, 2018). Agabi as cited in Egbuchiwe (2018) described management as the guidance, leadership and control of resources towards some common objectives. It can equally be said to be a process of assessing and maintaining an environment in which individuals working together in groups, can accomplish pre-selected mission and objectives effectively and efficiently. Then, administrator's effective management of the school physical resources as observed by Nwaham (2011) refers to the administrative processes which involves planning, organizing, directing and coordinating the physical resources of the school for school effectiveness and goal achievement. School physical resource management has a direct impact on the learning environment and is a key determinant of educational outcomes. It is therefore critical that effective school physical resource management practices or strategies be employed and align with the school improvement plan for achievement of educational goals (Usman, 2016). Obi (2019) stated that in recent times, utilization of school physical resources in Anambra State schools have increased drastically which requires that these resources are appropriately managed. But experience showcases that provision of school facilities do not necessarily amount to proper management and maintenance in the schools. There is the need therefore to have efficient maintenance system in the schools to ensure sustainability of school facilities. The Federal Republic of Nigeria (2013, p.63) also supports the management of physical resources for schools effectiveness by stating in the National Policy on Education (NPE) the need for the provision of efficient administrative and management control for maintenance and improvement of the educational resources and school system. The management and maintenance of the school plant should be part of the regular administrative functions of the school heads. It is an important duty that should not be overlooked because much capital has been invested in the procurement by the government and the school to some extent. Management of the school facilities and resources is also necessary for the health of the staff and students who use them. Strategies such as regular inspection, use of preventive chemicals, adequate storage system, use of cleaners, technicians, refurbishing of damaged facilities could be useful in the maintenance of school facilities as observed by Obi (2019). Ways of managing the physical resources in the school in essence, will further require the application of such management strategies as observed by Asabiaka cited in Usman (2016), Egbuchiwe (2018), Oluwatoyin (2014) and Uchendu, Ekanem and Jonah (2013) to include the preventive, routine, emergency, predictive and corrective strategies.

The preventive management strategy is carried out on the physical resources to avoid breakdown and ensure optimal performance of the facility. Routine management strategy is a maintenance service carried out periodically as scheduled by the school managers on the facilities at intervals probably monthly, quarterly or even annually depending on the agreed scheduled. Emergency management strategy is immediate repair and urgent measure or step carried out on sudden breakdown of facilities or school resources without delay. Predictive management strategy involves the use of computer software in order to predict equipment failure based on the age, user demand and performance measures on facilities, equipment and resources in the school. Corrective management strategy or maintenance consists of repairs to the building and equipment due to natural wear and tear or faulty items. The present study will therefore, determine school administrators' mode of application of the above mentioned strategies in management of the physical resources in the secondary schools. In reality, most of the physical resources in secondary schools in Anambra State are in deplorable state and condition. The poor situation of physical resources in the secondary schools in Anambra State has become worrisome and continued to raise so many arguments concerning administrators efficiency and effectiveness in management the physical resources in the schools. This has equally motivated the researchers to conduct the present study. It is against this background that the study was designed to investigate administrators' application of physical resources management strategies for secondary schools effectiveness in Anambra State.

Statement of the Problem

Physical resources which includes the classrooms, buildings, furniture, equipment, instructional materials, laboratories and workshops, among others, are crucial in promoting successful teaching and learning for schools effectiveness in the secondary schools. These physical resources are supposed to be managed properly by the school administrator (that is, principal) using various strategies such as the preventive, emergency, routine and predictive strategies. But it is however worrisome to see that many physical resources in the Nigerian school system including Anambra State secondary schools are in deplorable and devastating state therefore, affecting the quality of learning and education provided in the schools. Schools can never be effective or functional to actualize their educational and instructional goals without adequate and constant management which incorporates the maintenance and repair of the physical resources that promote effective teaching and learning. The poor and devastating state of physical resources in secondary schools in Anambra State which seem to hinder teachers' proficiency and students' learning has become a major issue of concern for many researchers and education stakeholders; and has equally warranted the present study. Given the importance of physical resources for schools effectiveness and promotion of quality education, there is the need for administrators as the chief custodian of all academic and extracurricular activities in the school to apply various strategies in management of

physical resources. The poor and ugly situation of many physical resources in the secondary school hindering the achievement of successful school effectiveness has created a gap which needs to be filled in the present study. Therefore, the need towards finding out administrators' application of physical resources management strategies for secondary schools effectiveness in Anambra State has become the problem of this present study.

Purpose of the Study

The purpose of this study was to examine administrators' application of physical resources management strategies for secondary schools effectiveness in Anambra State. Specifically, the study aimed at ascertaining administrators application of;

- 1. The routine physical resources management strategies for secondary schools effectiveness in Anambra State.
- 2. The emergency physical resources management strategies for secondary schools effectiveness in Anambra State.
- 3. The preventive physical resources management strategies for secondary schools effectiveness in Anambra State.
- 4. The corrective physical resources management strategies for secondary schools effectiveness in Anambra State.

Research Questions

The following research questions guided this study;

- 1. In what ways does the administrators apply the routine physical resources management strategies for secondary schools effectiveness in Anambra State?
- 2. In what ways does the administrators apply the emergency physical resources management strategies for secondary schools effectiveness in Anambra State?
- 3. In what ways does the administrators apply the preventive physical resources management strategies for secondary schools effectiveness in Anambra State?
- 4. In what ways does the administrators apply the corrective physical resources management strategies for secondary schools effectiveness in Anambra State?

Method

A descriptive survey research design was employed in the study. This design was used to collect data from a sample of school administrators, that is, principals in the public secondary school in Anambra State in order to share their opinions concerning administrators' application of physical resources management strategies for secondary schools effectiveness in Anambra State. Information gathered from the principals was analyzed using a statistical tool in order to generalize and draw conclusion on the study. Population of the study constituted 259 principals from the 259 public secondary schools located within 6 education zones in Anambra State. Information concerning principals was obtained from the Anambra State Post Primary Schools Services Commission as at January, 2020. Sample size of the study

comprised 130 principals from 130 public secondary schools, selected out of the entire principals' population at 10% (percent) using stratified random sampling technique. Justification for selecting the sample of principals and the public secondary schools at 50% was a means to enable the researchers have controllable sample size of the administrators' population in Anambra State. The choice of 50% for the sample selection is also in line with the recommendation of Nworgu (2015) who identified that 5% to 80% of any given population is adequate for any research work. A 24-item questionnaire titled "Administrators' Application of Physical Resources Management Strategies for Secondary Schools Effectiveness Questionnaire (AAPRMSSSEQ)" developed by the researchers served as instrument for data collection. Construction of the questionnaire was guided by the purpose of the study and research questions. Items in the questionnaire were organized in three clusters and structured on a 4-point scale weighted as follows: Strongly Agree (SA) -4, Agree (A) - 3, Disagree (D) - 2, Strongly Disagree (SD) - 1, in order to answer the research questions 1 to 4. The research instrument was validated by three experts in the Department of Educational Management and Policy, and Department of Educational Foundations, Faculty of Education, Nnamdi Azikiwe University, Awka, Anambra State. The experts determined the face and content validity of the questionnaire to make some necessary corrections on few items on the instrument and which were equally incorporated before the final distribution of the questionnaire to the principals. A pilot-test was conducted on a sample of 15 principals selected from 15 public secondary schools in Anambra State, which was not part of the study. The scores obtained were computed using Cronbach Alpha method which gave internal consistency reliability value 0.87, 0.94, 0.79 and 0.83 for each of the clusters, which were equally summed up to yield an overall reliability value of 0.86, showing that the questionnaire was reliable for conducting the study. Nworgu (2015) opined that the Cronbach Alpha statistical method determines the degree of consistency with which the item of an instrument provides a measure of how homogeneous or otherwise the items are. The Cronbach Alpha method is appropriate for instruments arranged into clusters just as the present study which was arranged in three clusters. Copies of the questionnaire were distributed to the respondents by the researchers with the help of six research assistants who knew the location of the secondary schools sampled. An on-the-spot method was also adopted by the researchers in distributing copies of the questionnaire to ensure maximum recovery of the questionnaire administered. Due to the present Corona Virus pandemic (COVID-19), the researchers and research assistants observed all the guidelines and protocols of the Nigeria Centre for Disease Control (NCDC) while distributing copies of the questionnaire. These research assistants were communicated about the essence of the study and how to approach the principals in order to get the necessary data from them. Distribution of all the copies of the questionnaire took a period of one week of completion. This enabled both the researchers and the research assistants to get the respondents at their different locations and likewise wait for them to fill the

questionnaire right there on the spot while maintaining the social distancing and use of face masks. A total of 130 copies of questionnaires were printed and distributed to the respondents. All the copies of the questionnaire distributed to the respondents were recovered back by the researchers and research assistants at a 100% rate of return.Data collated were analyzed using mean scores and standard deviation.The decision rule for interpreting the scores on each statement on the questionnaire was based on the mean scale, which was benchmarked on 2.50. Only mean scores of the respondents' statements which rated 2.50 and above were regarded as an indication of Agree, and therefore, accepted. While mean scores of the respondents' statements which rated below 2.50 was regarded as an indication of Disagree, and therefore not accepted.

Results

Research Question 1: In what ways does the administrators apply the routine physical resources management strategies for secondary schools effectiveness in Anambra State?

Table 1: Mean Scores and SD of Principals on Administrators Routine Physical Resources
Management Strategiesfor Secondary Schools Effectiveness in Anambra State

N = 1	130 Administrators (Principals)							
S/N	Please give your opinion concerning your application of the	SA	А	D	SD	Х	SD	Decision
	routine strategy in managing physical resources in your school:							
1.	I ensure that a general routine clean ups is conducted on the physical							
	resources in the school without any delay	24	77	13	16	2.84	0.87	Agree
2.	I ensure that minor servicing of instrument including tools are done at							
	intervals in the school as at when required	40	62	18	10	3.02	0.87	Agree
3.	I make sure that a routine inspection and cleaning of physical							
	resources fixture is done in the school	18	21	40	51	2.05	1.05	Disagree
4.	I ensure that most of the physical resources which are supposed to be							
	maintained on a yearly basis as per the requirements provided in the							
	manufacturer's guide are regularly followed	14	20	53	43	2.04	0.96	Disagree
5.	I devote time to maintain the physical resources in the school on a							
	monthly basis	16	28	39	47	2.10	1.03	Disagree
6.	I make sure that periodically servicing of machines and equipment are							
	conducted in the school	13	17	36	64	1.84	1.00	Disagree
7.	I make sure that most of the physical resources that are to be serviced							
	quarterly are regularly followed in due course	11	24	50	45	2.01	0.93	Disagree
	Grand Mean Score & SD =		_	_		2.27	1.05	Disagree

Analysis of data from Table 1 determined administrators routine physical resources management strategies for secondary schools effectiveness. This result indicated that only items 1 and 2 were rated above 2.50 of the acceptable mean scores, showing that the respondents (that is; school administrators) agreed with only these two statements. All the items from 3 to 7 were rated below 2.50 of the acceptable mean scores showing that the school administrators disagreed with these statements. The grand mean and standard deviation (SD) of 2.27 and 1.05 showed that there was no

deviation in the administrators' responses. The result therefore, revealed that the administrators did not effectively apply the routine physical resources management strategies for secondary schools effectiveness in Anambra State.

Research Question 2: In what ways does the administrators apply the emergency physical resources management strategies for secondary schools effectiveness in Anambra State?

Table 2: Mean Scores and SD of Principals on Administrators Emergency PhysicalResources Management Strategiesfor Secondary Schools Effectiveness in Anambra State

N =	130 Administrators (Principals)							
S/N	Please give your opinion concerning your application	SA	А	D	SD	Х	SD	Decision
	of the emergency strategy in managing physical							
	resources in your school:							
8.	I make sure that structural problem of most physical							
	resources are treated as emergency case when the need	1.5	~~		•	0.14	0.00	Disagree
	arises	17	22	53	38	2.14	0.98	
9.	I am committed to ensure that emergency cases of any							
	school physical equipment or resources such as broken							
	doors, windows, louvers, cracked walls, ma chine breakdown, etc are amended immediately without waste of							Disagraa
	time	11	32	44	43	2.08	0.95	Disagree
10.	I ensure that all emergency physical resources problems	11	52		73	2.00	0.95	
10.	are repaired immediately to prevent unwarranted future							Disagree
	disaster	12	39	20	59	2.03	1.06	Disugree
11.	Emergency case of broken or damaged physical resources							
	are replaced immediately on the spot without waste of							Disagree
	time	16	20	64	30	2.17	0.92	0
12.	Such emergencies like emptying or repair of soak away							
	and working on a leaking roof are treated immediately as							Disagree
	case of emergency	19	23	49	39	2.17	1.02	
	Grand Mean Score & SD =					2.12	0.99	Disagree

Analysis of data from Table 2 determined administrators emergency physical resources management strategies for secondary schools effectiveness. This result indicated that none of the items from 8 to 12 were rated above 2.50 of the acceptable mean scores. Rather, all the items were rated below 2.50 of the acceptable mean scores. This result showed that the respondents (that is; school administrators) disagreed with these statements without showing their agreements to any of the statements on the table. The grand mean and standard deviation (SD) of 2.12 and 0.99 showed that there was no deviation in the respondents' responses. The result therefore, revealed that the administrators did not effectively apply the emergency physical resources management strategies for secondary schools effectiveness in Anambra State.

Research Question 3: In what ways does the administrators apply the preventive physical resources management strategies for secondary schools effectiveness in Anambra State?

Table 3: Mean Scores and SD of Principals on Administrators Preventive PhysicalResources Management Strategies for Secondary Schools Effectiveness in Anambra StateN = 130 Administrators (Principals)

S/N	Please give your opinion concerning your application of	SA	Α	D	SD	Х	SD	Decision
	the preventive strategy in managing physical resources							
	in your school:							
13.	I ensure that a scheduled inspection which is designed to							
	prevent equipment further breakdowns and malfunctions of							
	physical resources is effectively carried out in the school	14	27	49	40	2.12	0.97	Disagree
14.	I devote time to conduct a periodic inspection on school							
	facilities and equipment for early detect ion and remedy of							Disagree
	the causes of the problem	11	32	33	54	2.00	1.00	
15.	I make sure that inspection reports on physical resources				60			
16	are recorded as a way of preventing further damages	9	17	35	69	1.74	0.93	Disagree
16.	I ensure that physical resou rces are constantly audited or							
	checkmated to serve as a preventive measure in order to							D'
	avert colossal wastage or total loss of any physical	15	22	55	38	2.11	0.05	Disagree
17.	resources	13	LL	33	38	2.11	0.95	
1/.	I make sure that school resources are immediately repaired to serve as preventing further damages, likewise improving							
	the for longevity of physical resources	23	14	65	28	2.25	0.98	Disagraa
18.	I see that regular inspection of the buildings including	23	14	05	20	2.23	0.90	Disagree
10.	immediate follow up repair of minor damages and							
	deterioration is done on any physical resources to prevent							Disagree
	further damage	28	32	29	41	2.36	1.14	Disagite
19.	I ensure that effective service procedure is designed to	20	52	2)	11	2.50	1,11	
17.	prevent equipment breakdowns and malfunctions through							Disagree
	early detection	19	18	39	54	2.02	1.07	2100051.00
	Grand Mean Score & SD =					2.08	1.02	Disagree

Analysis of data from Table 3 determined administrators preventive physical resources management strategies for secondary schools effectiveness. This result indicated that none of the items from 13 to 19 were rated above 2.50 of the acceptable mean scores. Rather, all the items were rated below 2.50 of the acceptable mean scores. This result showed that the respondents (that is; school administrators) disagreed with these statements without showing their agreements to any of the statements on the table. The grand mean and standard deviation (SD) of 2.08 and 1.02 showed that there was no deviation in the respondents' responses. The result therefore, revealed that the administrators did not effectively apply the preventive physical resources management strategies for secondary schools effectiveness in Anambra State.

Research Question 4: In what ways does the administrators apply the corrective physical resources management strategies for secondary schools effectiveness in Anambra State?

Table 4: Mean Scores and SD of Principals on Administrators Corrective PhysicalResources Management Strategies for Secondary Schools Effectiveness in Anambra StateN = 130 Administrators (Principals)

S/N	Please give your opinion con cerning your application of	SA	А	D	SD	Х	SD	Decision
	the corrective strategy in managing physical resources in							
	your school:							
20.	I make sure that the physical resources like equipment and							
	machines are correctly remodelled when broken down	10	24	41	55	1.92	0.95	Disagree
21.	I ensure that old physical resources such as the walls and							
	roofs of school buildings are immediately corrected when							Disagree
	damaged	17	26	44	43	2.13	1.02	
22.	I ensure that the existing physical resources like the school							
	buildings are correctly renovated when cracked	21	23	36	50	2.12	1.09	Disagree
23.	I make sure that the school physical resources are updated in							
	order to make such facilities adaptable to current educational							Disagree
	needs	13	37	55	25	2.29	0.89	-
24.	I ensure that t he errors or damages on any of the school							
	physical resources are corrected to avoid being obsolesce	11	26	45	48	2.00	0.95	Disagree
	Grand Mean Score & SD =					2.09	0.99	Disagree

Analysis of data from Table 4 determined administrators corrective physical resources management strategies for secondary schools effectiveness. This result indicated that none of the items from 20 to 24 were rated above 2.50 of the acceptable mean scores. Rather, all the items were rated below 2.50 of the acceptable mean scores. This result showed that the respondents (that is; school administrators) disagreed with these statements without showing their agreements to any of the statements on the table. The grand mean and standard deviation (SD) of 2.09 and 0.99 showed that there was no deviation in the respondents' responses. The result therefore, revealed that the administrators did not effectively apply the corrective physical resources management strategies for secondary schools effectiveness in Anambra State.

Discussion of Findings

Findings of the study revealed that the secondary school administrators' did not effectively apply the various physical resources management strategies that is; the routine, emergency, preventive and corrective management strategies. In determining administrators routine physical resources management strategies for secondary schools effectiveness; it was found out that a routine inspection and cleaning of physical resources fixture was not done in the school by the school administrators. Also, most of the physical resources which are supposed to be maintained on a yearly basis as per the requirements provided in the manufacturer's guide was not regularly followed by the school administrators. The administrators did not devote time to maintain the physical resources in the school on a monthly basis; and the school administrators did not ensure that periodically servicing of

machines and equipment are conducted in the school. They also did not make sure that most of the physical resources that are to be serviced quarterly are regularly followed in due course. All the above mentioned showcases that the administrators did not effectively apply the routine physical resources management strategies which could have affected the teaching and learning activities provided in schools, therefore, hindering secondary schools effectiveness in Anambra State. This finding agrees and concurs with Akinfolarin (2017) study which found out that principals' do not have managerial competencies for effective material resource management in secondary schools in Anambra State. Obi (2019) study found out that school administrators did not deploy good maintenance culture in managing school facilities so as to achieve the desired goals. Essentially application of measures such as; control of erosion, proper waste management, routine fumigation and regular cleaning among others will enhance management and maintenance of school facilities.

It was discovered through the finding that the administrators did not effectively apply the emergency physical resources management strategies for secondary schools effectiveness in Anambra State. This finding includes that that school administrators did not make sure that the structural problem of most physical resources were treated as emergency case when the need arises. Also, the school administrators were not committed to ensure that emergency cases of any school physical equipment or resources such as broken doors, windows, louvers, cracked walls, machine breakdown, etc were amended immediately without waste of time. The school administrators did not ensure that all emergency physical resources problems were repaired immediately to prevent unwarranted future disaster; and they did not ensure that emergency case of broken or damaged physical resources were replaced immediately on the spot without waste of time. Such emergencies like emptying or repair of soak away and working on a leaking roof were not treated immediately as case of emergency by the school administrators in the secondary schools. All the above mentioned showcases that the administrators did not effectively apply the emergency physical resources management strategies which could have affected the teaching and learning activities provided in schools, therefore, hindering secondary schools effectiveness in Anambra State. This finding corroborates and agrees with the finding of Ezeugbor and Okorji (2014) study which revealed among others that the physical resources in the universities were poorly maintained andmanaged. This revealed a poor maintenance culture in these areas in the federal university. Uchendu, Ekanem and Jonah (2013) study confirmed that maintenance culture in both public and private secondary school is poor; and the school physical resources were not regularly done and maintained using the emergency management strategies.

In discovering the ways in which the school administrators applied the preventive physical resources management strategies for secondary schools effectiveness; it was found out that the administrators did not ensure that a scheduled

inspection designed to prevent equipment further breakdowns and malfunctions of physical resources was effectively carried out in the school. The school administrators did not devote time to conduct a periodic inspection on school facilities and equipment for early detection and remedy of the causes of the problem. The school administrators did not make sure that inspection reports on physical resources were recorded as a way of preventing further damages; and also, the administrators did not ensure that physical resources were constantly audited or checkmated to serve as a preventive measure in order to avert colossal wastage or total loss of any physical resources. The school administrators did not make sure that school resources were immediately repaired to serve as preventing further damages, likewise improving the for longevity of physical resources. They did not see that regular inspection of the buildings including immediate follow up repair of minor damages and deterioration was done on any physical resources to prevent further damage. The school administrators did not ensure that effective service procedure was designed to prevent equipment breakdowns and malfunctions through early detection. All the above findings showcases that the administrators did not effectively apply the preventive physical resources management strategies, therefore, hindering secondary schools effectiveness in Anambra State. This finding corroborates and agrees with the findings of the studies of Uchendu, Ekanem and Jonah (2013) which showed that maintenance culture in both public and private secondary school is poor; the school physical resources were not regularly done and maintained using the preventive, emergency, routine and fixed time management strategies. Oluwatoyin (2014) study also supporting the above finding, found out that lack of preventive maintenance affected the management of physical resources in the schools.

The finding indicated that the school administrators did not effectively apply the corrective physical resources management strategies for secondary schools effectiveness in Anambra State. The finding included that the school administrators did not make sure that the physical resources like equipment and machines were correctly remodelled when broken down; and they did not ensure that old physical resources such as the walls and roofs of school buildings were immediately corrected when damaged. The administrators did not ensure that the existing physical resources like the school buildings were correctly renovated when cracked. They did not make sure that the school physical resources were updated in order to make such facilities adaptable to current educational needs. The school administrators did not ensure that the errors or damages on any of the school physical resources were corrected to avoid being obsolesce. Whereby the school administrators did not effectively apply the apply the corrective physical resources management strategies, this affected school effectiveness in Anambra State. This finding concurs with that of Uko (2015) study which indicated that strategies for educational facilities management were grossly inadequate in about 92% (Ninety two percent) of the schools covered. This development was much more compounded by obvious lack of corrective maintenance culture and physical resources management strategies in almost all the schools. There was the dire need for an integrated effort by all stakeholders to ensure

that facilities available are properly managed and maintained in consonance with the goals and objectives of the education system. This will facilitate and enhance a successful attainment of the teaching-learning outcomes in secondary schools within the State and Nigeria, generally. However, from all the findings of the study, effective management of educational resources which incorporates the physical resources is a sure root to promote school effectiveness in Anambra State. Therefore, stakeholders of the secondary schools in Anambra State should show priority concerns and focus attention to the issue of physical resources management for promotion of school effectiveness.

Conclusion

Since the educational physical resources are very important in the general administration of secondary schools in Nigeria and Anambra State inclusive, there is need that school administrators apply effective management strategies that will lead to the accomplish of this goal. But the findings of the study revealed that there were some discrepancies and shortfalls as regards to the secondary school administrators application of effective strategies in managing the physical resources in the school. The present study however submits and concludes that the secondary school administrators' did not efficiently and effectively apply the various physical resources management strategies, while managing these resources in the schools. This poor state calls for absolute redress. Hence, the recommendations made below.

Recommendations

Among the recommendations proffered from the findings of the study are that;

- 1. The Anambra State Government and Post Primary Schools Service Commission (PPSSC) should encourage administrators application of physical resources management strategies for secondary schools effectiveness in Anambra State through adequate funding, supervision and retraining programmes. This processes will ensure that constant routine strategy and checks are applied by the school administrators for the physical resources management.
- 2. The school administrators should be supported with adequate funds by the State Government and Post Primary Schools Service Commission (PPSSC) to effectively apply the emergency strategy when any physical resources need urgent attention.
- 3. Constant training and retraining programmes should be organized for the administrators to enable them acquire the basic skills that aid them in applying effective preventive strategy when managing the physical resources in the school.
- 4. The school administrators should also boost their partnership with other school stakeholders such as parents, other private sector and individual for their support and backing in order to efficiently establish the corrective strategy whenever they choose to apply such strategy in managing any damaged school physical resources.

References

- Akinfolarin, A.V. (2017). Analysis of principals' managerial competencies for effective management of school resources in secondary schools in Anambra State, Nigeria. *International Journal of Social Sciences, Humanities and E d u c a t i o n*, 1 (4), 1-11. Retrieved from : https://www.researchgate.net/publication/321975836.
- Akpakwu, S. O. (2012). *Educational management: Theory and practice*. Makurdi: Destiny Ventures.
- Botha, R. J. (2010). School effectiveness: Conceptualising divergent assessment approaches. South *African Journal of Education, 30,* 605-620. Retrieved from http://www.sajournalofeducation.co.za/index.php /saje/article/viewFile/391/219.

Chike-Okoli, A. (2007). *Issues in school administration*. Minna: ASOCOD Publishing House.

- Egbuchiwe, U. V. (2018). Management of human and physical resources in Nigeria's education system. . In C.A. Iloh, C.P. Enueme, J.O.N. Igbinedion & T.C. Ezugoh (Eds.). *Comprehensive text in educational administration, planning and supervision*, pp. 168-188. Enugu: Chembus Communication Ventures LTD.
- Ezeugbor, C. O. & Okorji, P. (2014). Provision and maintenance of physical resources for effective management of universities in South-East Zone of Nigeria. Retrieved from https://www.academia.edu/10777658/Provision_and_Maintenance_of_Phy sical_Resources_for_Effective_Management_of_Universities_in_South_E ast_Zone_of_Nigeria.
- Federal Republic of Nigeria (2013). *National policy on education*, 6th edition. Abuja: NERDC.
- Igbinedion, J. O. N. (2018). Educational management: Definition, concepts and scope. In C.A. Iloh, C.P. Enueme, J.O.N. Igbinedion & T.C. Ezugoh (Eds.). *Comprehensive text in educational administration, planning and supervision*, pp. 1-23. Enugu: Chembus Communication Ventures LTD.
- McHenry, A. N. (2009). The relationship between leadership behaviours, teacher collaboration, and student achievement. *Unpublished Ph. D. dissertations*.

Submitted to Graduate school, *University of Southern Mississippi*. Retrieved from htp://aquila.usm.edu/dissertations/.

- Nwahaw, C. O. (2011). School administration and supervision of instruction in Nigeria. Revised and enlarged edition. Agbor: Progress Printing Associates.
- Nworgu, B. G. (2015). *Educational research. Basic issues and methodology*. Enugu: University Trust Publishers.
- Obi, Z. C. (2019). Management and maintenance of secondary school facilities in Anambra State, Nigeria: Challenges and way forward. *Global Journal* o(Education, Humanities and Management Sciences (GOJEHMS), 1 (1), 165-171. Retrieved from : https://www.researchgate.net/publication/33444007.
- Oluwatoyin, I. O. (2014). Maintenance strategies and condition of public secondary school buildings in Ado-Odo/Ota Local Government Area Ogun State, Nigeria. Unpublished Ph. D thesis. Submitted to the School of Postgraduate Studies, Covenant University, Ogun State, Nigeria. Retrieved from http://eprints.covenantuniversity.edu.ng/11036/1/izobomartins%20FINAL%20pgs.pdf.
- Uchendu, C. C., Ekanem, E. E. & Jonah, S. T. (2013). Resource maintenance for the provision of educational services in public and private secondary schools in Rivers State, Nigeria. *European Journal of Business and Social Sciences, 2* (1), 15 - 23. Retrieved from http://www.ejbss.com/recent.aspx.
- Uko, E. S. (2015). Principalship and effective management of facilities in secondary schools in Cross River State, Nigeria. *International Journal of Academic Research and Reflection*, 3 (1), 64-76. Retrieved from http://www.idpublications.org/wp-content/.
- Usman, Y. D. (2016). Educational resources: An integral component for effective school administration in Nigeria. *Research on Humanities and Social Sciences*, 6(13), 27-37. Retrieved from https://files.eric.ed.gov/fulltext/ED578024.pdf.