

## **Physical Resource Management in Covid-19 Pandemic Era for Effectiveness Of Secondary Schools in Rivers State.**

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### **Abstract**

*The study investigated physical resource management in covid-19 pandemic era for effectiveness of secondary schools in Rivers State. Descriptive survey design was adopted in the study; the population of study comprised of 261 principals and 7619 teachers in the public secondary schools in Rivers State. The stratified and simple random sampling technique was used to draw a sample of 52 principals and 1524 teachers which represented 20% of the total population. The instrument for data collection was the questionnaire titled "Physical Resource Management in Covid-19 Pandemic Era for Effectiveness of Secondary Schools Questionnaire (PRMC-19PEESSQ)" which was validated by two experts in the Department of Measurement and Evaluation, Faculty of Education, University of Port Harcourt. The reliability index of 0.81 was established using Cronbach Alpha technique. For the purpose of data analysis, 45 and 1500 copies of questionnaire were retrieved from the principals and teachers respectively and were used for data analysis. Mean and standard deviation were the descriptive statistics employed to answer the research questions while z-test was used to test the null hypotheses at 0.05 level of significance. The study revealed inadequate provision, low extent of utilization and low level of maintenance of physical resources in the secondary schools in Rivers State. It was recommended based on the findings of the study among others that the government through a collaborative effort with the private sector should ensure that physical resources are provided in sufficient quantity in the school.*

**Keywords:** Physical, Resource, Management, Covid-19, Pandemic and Effectiveness

### **Introduction**

The contemporary school requires a lot of resources that are indispensable and to be utilized in order for a school to efficiently accomplish the desired goals and objectives. Physical resources are one of such vital resources that is paramount in enhancing teaching and learning effectiveness in the school. Good physical resources are one of the major indicators determining the tone, patronage and can positively influence the academic performance and overall productivity of both the teachers and the students. The establishment, continuous existence and flourishing of any school is in no doubt without a well-organized and functional physical resources. It is on this note that Akomolafe and Adesua (2016) postulated that physical resources are germane to the effective learning and academic performance of students.

In recent times, the state of physical resources is drawing the attention of many stakeholders in education as the safety and health of both teachers and students seems to be severely threatened as a result of the outbreak of Covid-19 pandemic. The management of physical resources is imperative in guaranteeing a safe, healthy and conducive environment that can facilitate teaching and learning effectiveness. It is on this note, that Wunti, Hafsatan and Igbaji (2017) posited that the quality of education our students receive bear direct relevance to the availability or the lack thereof of physical facilities and the overall atmosphere in which learning takes place. Successful teaching and learning is exemplified by safe, hygienic, quiet, healthy and comfortable environment.

The dearth of basic school physical resources seems to be a contemporary issue. Over the years, this has caught the attention of the numerous members of the public and the elites as it appears that the broad goals and the specific objectives of the secondary level of education seems thwarted. Okpalaoka in Odey (2018) lamented that structures of most of the schools are worn out and that there are visible signs of leaking roof, in accessible route, poor aesthetics classrooms without windows and doors, dusty floor with little or no desks and chairs. Furthermore, Anike and Tari (2011) reported that in some communities, that the school building is in dilapidated state, that some are de-roofed for several years which shows a state of total neglect.

Management of physical resources in the school is so imperative most especially in times like this that the school is confronted with acute shortage of fund and other critical resources amidst Covid-19 pandemic. It is one thing to provide school physical resources, it is another thing to ensure that the facilities are managed to yield the desired result in the school. It is against this backdrop that Lawanson and Gade (2011) postulated that school facilities management is a systematic process of rationalizing the provision, use and maintenance of the facilities within an educational institution to ensure their optimum utilization and achievement of educational objectives both in the immediate and in the future given the available resources. School resource management is the rational provision of essential facilities within the school in the most cost-effective way, putting the resources into

the most economic use, monitoring the use of the resources to guarantee that the facilities remain crucial in solving the needs of the school users, providing effective maintenance practices for the facilities to prolong their life span and continuous review of the resources to ascertain they meet the ever changing needs of the school.

One of the main indicators by which successful educational programmes and policies is assessed is the provision of the right physical facilities for the right type of learners, in the relevant quantity, at the right place and time. School physical facilities have been identified to play crucial role in contributing to teaching and learning activities in the school. On the other hand, non-availability of the various physical resources in the school handicapped the teachers and place the students at disadvantaged position. In this regard, Abdullahi, Wan & Wan (2015) emphasized that availability in quality and quantity of suitable material, physical resources in good supply, are crucial for the achievement of curriculum objectives. Onwuamanam in Odey (2018) maintained that inadequacy of instructional facilities were the major problems facing Nigerian educational system. Similarly, Asiyai (2012) avowed that school facilities in public secondary schools are generally in a state of disrepair. For the desired goals of the secondary level of education to be effectively achieved, the required facilities in the school need be adequately provided for both the teachers and the learners.

The responsibility of the government is to provide the required physical resources for the smooth running of the school, while it is the duty of the school administrators, teachers, students and general school users to ensure that the available resources are judiciously utilized to accomplish the purpose they were set up for. Igbiniedion (2014) asserted that utilization is the actual use of facilities to achieve desired goal and further advised that school facilities should be optimally used to their full capacity. Ebong (2006) posited that the school facilities are not utilized and attributed increase enrolment as an important factor that affect the utilization of school resources. She further stated that, an increase in enrolment puts pressure on the available resources, both equipment and class space. Njoroge in Mucai (2013) concluded that unavailability of educational resources among other factors hinders effective utilization. In the same vein, Offorma in Ugwuanyi (2013) attributed one of the reasons why available materials are not utilized by many teachers in schools and colleges to lack of the necessary skills to operate them. Ugwuanyi (2013) therefore highlighted that one of the factors contributing to non-utilization of physical education facilities, equipment and supplies in secondary schools in Nigeria, is lack of maintenance culture of facilities, equipment and supplies.

For physical resources to be optimally used, proper maintenance is imperative. No school physical resource can ever remain at its best form without either routine, preventive, corrective or remedial maintenance carried out. It is in this regard that Kpee (2013), opined that maintenance of school facilities refers to all the continuous effort of checking, improving, repairing, renewing, repainting, remodeling, controlling the use, modifying and ensuring the effective use of teaching

facilities in order to make them continuously relevant. Onyeagbako (2014) decried that, facility management is haphazardly addressed at all levels of educational system. She further attributed the fast ageing and deterioration of school buildings, grounds and equipment to lack of maintenance culture. Uma, Obidike and Ihezukwu (2014) lamented that maintenance culture, which encompasses provision for adequate care of the hard-earned infrastructure, has not gained ground in the consciousness of the resource managers in Nigeria. This view was corroborated by Olufunke (2011) who maintained that because of the mentality of Nigerians towards maintenance, government properties do not last for a longer period of time.

### **Statement of Problem**

Physical resource management is very crucial in defining moment like this that the World battles with covid-9 pandemic. There seems to be the likelihood of the challenges of the adequate provision of basic school facilities to curtail the spread of the deadly virus, putting the available resources into judicious use and effective maintenance of the already existing physical resources which seems to militate against the attainment of the full goals and objectives of the secondary schools in Rivers State. The government appears to be making effort in the general provision of the school physical resources, though the efforts seems not to be sufficient and very satisfactory. The school appears to be confronted with the challenge of subjecting the various resources into judicious use and effectively maintaining regularly the already existing ones so as to accomplish the goals of the school and create a more conducive, safe and healthy environment. This has always been an issue of serious debate among the enlighten citizens. Therefore, it is against these backdrops that this study is focused on investigating the management of physical resources (provision, utilization and maintenance) in the secondary school environment in Rivers State.

### **Aim and Objectives of the Study**

The aim of the study was to investigate the management of physical resources in covid-19 pandemic era for the effectiveness of secondary schools in Rivers State. However, the specific objectives of the study include:

1. To determine the adequacy of the provision of physical resources in covid-19 era in secondary schools in Rivers State.
2. To determine the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State.
3. To determine the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

### **Research Questions**

The following research questions guided the study:

1. How adequacy is the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State?

2. What is the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State?
3. What is the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State?

### **Hypotheses**

**H0<sub>1</sub>**. There is no significant difference between the mean scores in opinions of the principals and teachers on the adequacy of the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

**H0<sub>2</sub>**. There is no significant difference between the mean scores in opinions of the principals and teachers on the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State

**H0<sub>3</sub>**. There is no significant difference between the mean scores in opinions of the principals and teachers on the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

### **Review of Related Literature**

The secondary school is very important in our society and play pivotal role in the development of a child. The secondary education according to Federal Government of Nigeria (2004) is the education children receive after primary education and before the tertiary state; its broad goals are focused on preparing the individuals for useful living within the society and higher education. Nwideduh and Adieme (2016) posited that secondary schools serve as a bridge between the foundation (primary) and the apex (tertiary) levels of education. They stated further, that it is expected that the knowledge the children acquired in the primary schools is further expanded in the secondary schools, thereby preparing them for higher education and useful living in the society.

Resources are indispensable in accomplishing the broad goals of the secondary level of education. Resources in the words of Asodike and Adieme (2014) are seen as anything that can be utilized in order to achieve objectives or goals of an organization. Furthermore, Adetoro in Asodike and Adieme (2014) asserted that resources are all the things that are used directly and indirectly for the purpose of supporting, facilitating, influencing or encouraging transmission or acquisition of knowledge, competence, skills and know-how. Knowing well that resources are indispensable to achieving the goals of the secondary education and that they are relatively scarce, the available ones in the school need be managed with high level of prudence to attain the desired target.

Physical resource is among the numerous resources that a school cannot do without in the quest to accomplishing the broad goals and specific objectives of the secondary level of education. The term physical resources have been used synonymously with school plants, educational resources, educational facilities, physical facilities or resources. Whichever nomenclature used, physical resources

are fundamental to the attainment of the goals and objectives of the school. Lawanson and Gade (2011) viewed physical resources as school facilities and that they are those things that enables the teacher to do his/her work very well and helping the learners to learn effectively. Adeyemi in Adeyemi and Adu (2010) emphasized that educational facilities are the major instrument that contributes to students' academic development in the schools.

Management of physical resources in the school is a vital ingredient that increases the worth and longevity of the physical resources in the school. This will tend to ensure that the safety and health of the principals, teaching and non-teaching staff, students and other school users in covid-19 pandemic era is guaranteed. According to Facility Management International (2013), physical resource management is not all about how properly properties can be utilized for the people and the organization that use them, it is seen as a professional management of organization properties which are essential for the achievement of organizational goals. In like manner, Lawanson and Gade (2011) contended that school facilities management is a systematic process of rationalizing the provision, use and maintenance of school facilities within an educational institution to ensure their optimum utilization and achievement of educational objectives both in the immediate and in the future, given the available resources. Physical resource management is the rational provision, utilization and proper maintenance of the educational facilities within the school environment for their optimum performance.

The provision of adequate physical resources is vital in overcoming the overwhelming health challenges posed by the advent of covid-19 pandemic. Lawanson and Gade (2011) contended that our school can only be what we want them to be if only proper steps are taken in the provision of all that will make teaching and learning effective. The provision of adequate and relevant physical resources has become a daunting issue not only to the secondary level of education, but to all levels of education. Ajayi and Ayodele in Akomolafe and Adesua (2016) conceptualized that the availability of physical resources is important to achieving effectiveness in instructional delivery and supervision. They further decried the fact that non-availability of basic facilities, laboratories, library and so on that is experienced in the secondary schools is perfect reflection of what obtains in the university system. Adeyemi and Adu in Odey (2018) reported a severe shortage of physical facilities in public secondary schools in Ekiti State which is an indication that the schools were not ready for UBE programme.

The provision of physical facilities will constitute monumental wastage, if such resources cannot be put into effective use to add value to the school system. Physical resources in the school ought to be optimally used to yield the desired result. Kitheka in Mucai (2013) observed that schools with abundant resources not only utilized them efficiently and consequently fail to raise the students level of performance. Njoroge in Mucai (2013) supported the view of Kitheka that unavailability of educational resource among other factors hinders effective



utilization. Correspondingly, Offorma in Ugwuanyi (2013) credited one of the reasons for non-utilization of available resources by some teachers in the school and colleges to that of lack of necessary skills to operate them.

Maintenance of physical resources is an important task that should be executed in every school. This is because, it is relevant in assuring the availability of basic facilities that are required for better performance of a school. It is on this note that Kpee (2013) conceptualized maintenance of school facilities to be all the continuous effort of checking, improving, repairing, renewing, repainting, remodeling, controlling, the use, modifying and ensuring the effective use of teaching facilities in order to make them continuously relevant and useful. Asiabaka in Onyeagbako (2014) opined that facility maintenance is an issue that concerns all levels of educational system ranging from the pre-kindergarten to the tertiary level. Onyeagbako (2014) lamented that facility maintenance is an aspect of the school that is generally overlooked and that facility maintenance is haphazardly addressed at all levels of educational system.

### **Methodology**

The study adopted descriptive survey design. The population of the study comprised the public secondary schools in Rivers State while the respondents were the 261 principals and 7880 teachers in the various secondary schools in Rivers. A sample size of 1576 respondents (52 principals and 1524 teachers respectively) were drawn using stratified and simple random sampling technique which represented 20% of the entire population. The minimum sample size was established through Taro Yamane's Method for determining minimum sample size. The instrument used for data collection was the researchers constructed questionnaire titled "Physical Resource Management in Covid-19 Pandemic Era for Effectiveness of Secondary Schools Questionnaire (PRMC-19PEESSQ)" which was validated by two experts in the Department of Measurement and Evaluation, Faculty of Education, University of Port Harcourt. The instrument consisted of two parts, section A and B. Section A dealt with demographic information while Section B had the various 30 items which was further subdivided into 3 parts. The response pattern of the instrument was arranged on a 4-point scale. Experts in measurement and evaluation determined the face and content validity, while the reliability was ensured using Cronbach Alpha technique which yielded an index of 0.81. Mean and standard deviation were used to answer the research questions. The criterion mean was 2.50, the statement that falls below 2.50 was rejected and the one above 2.50 was accepted. The null hypotheses were tested using z-test statistics at 0.05 level of significance. Any response therefore, with a calculated z-value above 1.96 was rejected and below 1.96 was accepted. A total of 45 copies of questionnaire were retrieved from the principals representing 87% of the administered questionnaire and were used for data analysis. While a total of 1500 copies of questionnaire were retrieved from the teachers representing 98% and were equally used for data analysis.

**Research Question 1:** How adequacy is the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State?

**Table 1:** Mean scores and standard deviation showing the adequacy of the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

S/N	Items	Principal (n=45)		Teacher (n=1500)		Total (n=1545)		Remark
		Mean	Std.	Mean	Std.	Mean	Std.	
1	Instructional facilities are adequately provided	2.09	0.76	2.22	0.89	2.16	0.83	Inadequate
2	Health facilities are adequately provided	2.04	0.88	2.21	0.88	2.13	0.88	Inadequate
3	Covid-19 PPEs are provided adequately	2.18	0.96	2.22	0.88	2.20	0.92	Inadequate
4	Functional sick bays are readily available	2.02	0.89	2.24	0.90	2.13	0.89	Inadequate
5	Residential facilities are provided adequately	1.67	0.83	1.83	0.84	1.75	0.83	Inadequate
6	Recreational facilities	2.38	0.78	2.24	0.87	2.31	0.82	Inadequate
7	Safety facilities are readily available	1.84	0.77	1.75	0.92	1.80	0.84	Inadequate
8	Well-equipped modern lecture halls for covid-19 guideline compliance	2.07	0.89	2.27	0.90	2.17	0.90	Inadequate
9	E-learning facilities readily available	1.96	0.85	1.95	0.92	1.95	0.89	Inadequate
10	General purpose facilities are adequately provided	2.11	0.88	2.28	0.90	2.19	0.89	Inadequate
Grand Total		2.04	0.86	2.12	0.91	2.08	0.89	Inadequate

Criterion mean =2.50, the statement that falls on 2.50 and below is inadequate above 2.50 is adequate

Data on Table 1 showed the answers on the question on the adequacy of the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers state. The remarks of the principals and teachers on all the items showed inadequate provision of physical facilities. From the responses of the principals and teachers on the adequacy of the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers state, it is noticeable that the provision of physical resources in covid-19 pandemic era in the secondary schools in Rivers state is inadequate.



**Research Question 2:** What is the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State?

**Table 1:** Mean scores and standard deviation showing the extent of utilization of physical resources in covid-19 pandemic era in the secondary schools in Rivers State

S/N	Items	Principal (n=45)		Teacher (n=1500)		Total (n=1545)		Remarks
		Mean	Std.	Mean	Std.	Mean	Std.	
1	Instructional facilities are utilized	1.53	0.79	1.56	0.64	1.55	0.71	Low Extent.
2	Health facilities used adequately	1.47	0.50	1.41	0.49	1.44	0.50	Low Extent.
3	Residential facilities are well used	1.69	0.79	1.53	0.63	1.61	0.71	Low Extent.
4	General purpose facilities are adequately used	1.58	0.72	1.40	0.49	1.49	0.61	Low Extent.
5	Covid-19 PPPs are well used	1.53	0.63	1.54	0.63	1.54	0.63	Low Extent.
6	Sick Bays are properly used	1.78	0.93	1.74	0.72	1.76	0.83	Low Extent.
7	Recreational facilities are used accordingly	1.67	0.80	1.41	0.49	1.54	0.64	Low Extent.
8	E-learning facilities are well used	1.58	0.72	1.66	0.70	1.62	0.71	Low Extent.
9	Safety facilities are well utilized	1.56	0.62	1.41	0.49	1.48	0.56	Low Extent.
10	School equipment are put in proper use	1.93	0.86	1.59	0.67	1.76	0.77	Low Extent.
<b>Grand Total</b>		<b>1.63</b>	<b>0.75</b>	<b>1.53</b>	<b>0.61</b>	<b>1.58</b>	<b>0.68</b>	Low Extent.

Criterion mean = 2.50, the statement that falls on 2.50 and below shows low extent above 2.50 shows high extent

Data on Table 2 represented the responses of the principals and teachers on the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State. The responses of the respondents indicated low extent in all the items. From the responses of the principals and the teachers on the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State, it is obvious that there is low extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

**Research Question 3:** What is the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State?

**Table 3:** Mean scores and standard deviation showing the extent of maintenance of physical resources in covid-19 pandemic era in the secondary schools in Rivers State.

S/N	Items	Principal (n=45)		Teacher (n=1500)		Total (n=1545)		Remarks
		Mean	Std.	Mean	Std.	Mean	Std.	
1	Routine maintenance is regularly carried out in the school	2.18	1.30	2.24	0.89	2.21	1.09	Low Extent.
2	Preventive maintenance is carried out regularly in the school	1.33	0.48	1.44	0.54	1.39	0.51	Low Extent.
3	There is regular corrective maintenance exercise in the school	1.58	0.62	1.38	0.49	1.48	0.55	Low Extent.
4	There is regular remedial maintenance culture in the school	1.51	0.63	1.41	0.49	1.46	0.56	Low Extent.
5	Physical resources are near their original state due to constant maintenance	1.64	0.71	1.39	0.49	1.52	0.60	Low Extent.
6	There is strict adherence to maintenance culture	1.36	0.48	1.42	0.49	1.39	0.49	Low Extent.
7	Poor compliance to maintenance culture	1.49	0.73	1.58	0.69	1.54	0.71	Low Extent.
8	High level of wastages observed due to lack of physical resource maintenance	1.87	0.76	2.26	0.89	2.06	0.82	Low Extent.
9	Lack interest in maintenance of school facilities	3.27	0.86	3.04	0.86	3.15	0.86	High Extent.
10	Lack basic know-how in maintenance of some school facilities	3.47	0.50	3.43	0.56	3.45	0.53	High Extent.
<b>Grand Total</b>		<b>1.97</b>	<b>1.04</b>	<b>1.96</b>	<b>0.98</b>	<b>1.96</b>	<b>1.01</b>	Low Extent.

Criterion mean = 2.50, the statement that falls on 2.50 and below shows low extent above 2.50 shows high extent

Data on Table 3 indicated the responses on the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State. The remarks of the respondents on item 1 to 8 showed low extent while that of their remarks on item 9 and 10 showed high extent. This is an indication that majority of

the respondents do not have interest in maintenance of the school facilities and as well lack the basic know-how in physical resource maintenance. From the responses of the principals and teachers it is therefore obvious that there is a low extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

### Test of Hypotheses

**H0<sub>1</sub>:** There is no significant difference between the mean scores in opinions of the principal and teachers on the level of adequacy of the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

**Table 4:** z-test analysis of differences between the mean scores in opinions of principals and teachers on the level of adequacy of the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

	N	$\bar{X}$	SD	Df	z-cal.	z-cri.	Decision
<b>Principals</b>	45	2.04	0.86		-0.61	1.96	Not Significantly different (Accept Ho)
<b>Teachers</b>	1500	2.12	0.91	1543			

Table 4: showed the summary of the mean, standard deviation and z-test analysis of the difference between the principals and the teachers on the adequacy of the provision of physical resources in covid-19 pandemic era. From the table, the calculated z value stood at -0.61 while the z-critical value was 1.96 with 1543 degrees of freedom at 0.05 level of significance. Since the calculated z-test value is less than the critical z-value of 1.96 the null hypothesis that stated that there is no significant difference between the mean scores in opinions of the principal and teachers on the adequacy of the provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State, was accepted.

### Test of Hypotheses

**H0<sub>2</sub>:** There is no significant difference between the mean scores in opinions of the principals and teachers on the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

Table 5: z-test analysis of differences between the mean scores in opinions of principals and teachers on the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

	N	$\bar{X}$	SD	Df	z-cal.	z-cri.	Decision
<b>Principals</b>	45	1.63	0.75		0.89	1.96	Not Significantly different (Accept Ho)
<b>Teachers</b>	1500	1.53	0.61	1543			

Table 5: indicated the summary of the mean, standard deviation and z-test analysis of the difference between the principals and the teachers on the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State. From the table, the calculated z value stood at 0.89 while the z-critical value stood at 1.96 with 1543 degrees of freedom at 0.05 significance level. Since the calculated z-test value of 0.89 is less than the critical z-value of 1.96, the null hypothesis which stated that there is no significant difference between the mean scores in opinions of the principals and teachers on the extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State, was accepted.

### Test of Hypotheses

**H<sub>0</sub>**, There is no significant difference between the mean scores in opinions of the principals and teachers on the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

Table 5: z-test analysis of differences between the mean scores in opinions of principals and teachers on the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State.

	N	$\bar{X}$	SD	Df	z-cal.	z-cri.	Decision
<b>Principals</b>	45	1.97	1.04		0.06	1.96	Not Significantly different (Accept Ho)
<b>Teachers</b>	1500	1.96	0.98	1543			

Table 6: Summarizes the mean, standard deviation and z-test analysis of the difference between the principals and the teachers on the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State. From the table, the calculated z value stood at 0.06 while the z-critical value stood at 1.96 with 1543 degrees of freedom at 0.05 significance level. Since the calculated z-test value of 0.06 is less than the critical z-value of 1.96, the null hypothesis that stated

that there is no significant difference between the mean scores in opinions of the principals and teachers on the extent of maintenance of physical resources in covid-19 pandemic era in secondary schools in Rivers State, was accepted.

### **Discussion of findings**

The provision of physical resources in covid-19 pandemic era in secondary schools in Rivers State was revealed to be inadequate from the findings of the study, this is because the grand mean of 2.08 is less than the criterion mean of 2.50. The findings are in line with Ajayi and Ayodele in Akomolafe and Adesua (2016) who observed that non-availability of basic facilities, laboratories, library and so on that is experienced in the secondary schools is perfect reflection of what obtains in the university system. Okpalaoka in Odey (2018) equally supported that the structures of most of the schools are worn out and that there are visible signs of leaking roof, inaccessible route, poor aesthetics, classrooms without windows and doors, dusty floor with little or no desks and chairs.

The findings from the study also shown low extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State. This is because the grand mean of 1.58 is less than the criterion mean of 2.50. The findings are in line the view of Ebong (2006) that the school facilities are not utilized and attributed increase enrolment as an important factor that affect the utilization of school resources. Njoroge in Mucai (2013) in support of the findings, established that unavailability of educational resources among other factors hinders effective utilization. In the same vein, Offorma in Ugwuanyi (2013) attributed one of the reasons for available materials not utilized by many teachers in schools and colleges to lack of the necessary skills to operate them.

More so, the findings from the study equally revealed low extent of utilization of physical resources in covid-19 pandemic era in secondary schools in Rivers State as a result of the grand mean of the grand mean of 1.96 less than the criterion mean of 2.50. The findings corroborated the view of Onyeagbako (2014) that facility management is haphazardly addressed at all levels of educational system. Uma, Obidike and Ihezukwu (2014) supported the findings that maintenance culture, which encompasses provision for adequate care of the hard-earned infrastructure, has not gained ground in the consciousness of the resource managers in Nigeria. The findings are also in line with Olufunke (2011) who observed that because of the mentality of Nigerians towards maintenance, government properties do not last for a longer period of time.

### **Conclusion**

The researchers based on the findings of the study, concluded that the physical resources in the secondary schools in Rivers State are not only inadequate but poorly utilized and maintained. The poor extent of utilization and maintenance may tend to have a negative effect on the life span of the resources thereby

compromising the safety and health of students, teachers and the entire school users during the covid-19 era and even beyond.

### Recommendations

- i. The government through a collaborative effort with the private sector should ensure that physical resources are provided in sufficient quantity in the school to avoid to ensure safety and health of the teachers, students and the entire school users.
- ii. The secondary school administrators should ensure that the school physical resources are judiciously utilized for the purpose they were provided for.
- iii. The secondary school administrator should as well ensure that constant routine maintenance practices are carried out in the school to keep the school physical resources near their original state.

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