



Effective Implementation of Universal Basic Education in Rivers State: Role and Utilization of Physical Resources.

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Abstract

This study investigated the utilization of physical resources in the effective implementation of UBE in Rivers State. Descriptive survey design was adopted. Two research questions were raised to guide the study while one null hypothesis was formulated and tested at 0.05 level of significance. The population of the study consisted of 249 JSS school in Rivers State. A sample of 20 urban and 30 rural JSS which represented 20% of the entire population was drawn through stratified random sampling technique. Observation schedule and a questionnaire titled, "Factors Affecting the Utilization of Physical Resources in the Implementation of UBE Questionnaire (FAUPRIUBEQ)" were used for data collection. The instruments were validated and its reliability tested, $r = 0.78$ through Pearson Product Moment Correlation Coefficient. While Kr_{20} was used to test the reliability of the observation schedule, $r = 0.81$. The mean and SD were used to answer the research questions while z-test was used to test the hypothesis. The results revealed that inadequate provision of physical resources and poor preventive maintenance culture are some of the factors hindering the utilization of physical resources. Based on the findings, the following recommendations were made: UBE should be properly funded by government in other to enhance its effective implementation and increase in enrolment should be accompanied by increase in provision of physical resources and adequate maintenance of available ones.

Keywords: Utilization, Physical Resources, Implementation, Universal Basic Education, UBE.

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INTRODUCTION

Nigeria has adopted several reforms in an attempt to improve her education system. The Universal Basic Education (UBE) is one of such education reforms. It aimed at widening the access to basic education and improving the quality of its provision. It is a nine year educational intervention programme designed to eradicate illiteracy, ignorance and poverty as well as stimulate and accelerate national development, political consciousness and national integration (Tahir, 2011). UBE is a nine year compulsory education programme for all children of school age in Nigeria. It is being provided free of charge to pupils/parents. In addition, there is home grown feeding provided by the government to all the pupils. These incentives have made basic education attractive and it has resulted to increased enrolment at the basic level of education.

The implementation of UBE programme requires adequate provision of the necessary resources such as human and material resources to cope with the increased enrolment being experienced as a result of the implementation of the programme. This is because when access to education is increased without a corresponding increase in the provision of necessary resources, quality and standards will be adversely affected. One of the major resources needed for effective implementation of UBE is the material (physical) resources. Physical resources otherwise known as infrastructure are very important resources that enhance educational activities in the school. Physical resources in the context of this paper include libraries, recreational facilities such as lavatories, refectories, play grounds (Agabi, 2014). They are very important because they provide accommodation for all other variables in teaching.

Research carried out by some scholars has revealed that there is a positive correlation between the physical environment of the school and students' academic performance. (Onyeagbako, 2014). Physical facilities contribute to a very high degree, the quality of education received by the students. Where they are adequately provided and are combined with quality teachers and good curriculum, the academic performance of the students will be greatly enhanced. Physical facilities contribute immensely to quality education delivery at the basic education level and they go a long way to determine the quality of the output. Bearing in mind the importance of physical resources in education service delivery, it is necessary to investigate the extent to which available physical resources are utilized for effective implementation of UBE and also, to identify the factors affecting the utilization of physical resources for the implementation of UBE.

Statement of the Problem

There are so much complains about the standard of education. Many believed that the quality and quantity of education delivered to the pupils at the basic level of education is not adequate. Considering the fact that some of the pupils at this level could not properly express themselves in writing and verbally. Their poor performances in both internal and external examinations further buttress the fact that there are problems facing the UBE programme. These issues could be attributed to a lot of factors such as availability and utilization of physical resources for effective implementation of the UBE programme. This is what motivated the researcher to carry out this study. The problem of this study therefore, is to investigate the utilization of physical resources for an effective implementation of UBE in Rivers State, Nigeria.

Purpose of the Study

The purpose of this study primarily, is to investigate the utilization of physical resources for the effective implementation of Universal Basic Education in Rivers State, Nigeria. Specifically, the objectives of the study are to:

- Identify the extent physical resources are utilized for effective implementation of UBE in Rivers State.
- Find out the factors affecting effective utilization of physical resources for the effective implementation of UBE in Rivers State.

Research Questions

The study was guided by the following research questions:

- To what extent are physical resources utilized for effective implementation of universal Basic Education programme in Rivers State, Nigeria?
- What are the factors affecting the utilization of physical resources for effective implementation of Universal Basic Education programme in Rivers State, Nigeria?

Hypothesis

H₀₁: There is no significant difference between the mean scores of male and female principals on the factors affecting the utilization of physical resources for effective implementation of UBE programme in Rivers State, Nigeria.

REVIEW OF LITERATURE

Theoretical Framework

This study is anchored on the input-output production function theory in education propounded by Combs in 1968. Combs considered human, financial and material resources as inputs that are invested in the education system by the society to produce refined and educated individuals. According to him what goes into the educational system determines to a large extent what comes out of it. This implies that the value, amount and quality of resources provided in the educational system contribute immensely to the successful implementation of educational programmes and achievement of set goals.

The Concept of Resources

A resource is a useful item or material that makes work easier or that enhances productivity. It could be described as a valuable material applied in a production process to increase the quality or quantity of the output. In line with this definition, Agabi (2014) states that a resource is any material that can be applied to a work process to enhance productivity. They are items that are required for effective performance of workers. A resource is an asset to its owner or possessor

because it is useful and it can be used to create wealth when it is appropriately utilized (Ebong, 2006).

There are different classes of resources. According to Adeogun (1999), we have physical resources, material resources, human resources and financial resources. On the other hand Enahwo (1990) classified resources into tangible and intangible resources. The tangible resources are the human, physical, material and financial resources while time, a very important resource that is often neglected is regarded as intangible resources (Ebong, 1997).

Physical Resources

Physical resources consist of Physical things (tangible) which can be easily seen and quantified. According to Ebong (2006) Physical resources include the school plant, classrooms, offices, recreational facilities, the environment that gives aesthetic values to the school. They equally include plant, equipment and materials necessary for teaching and learning process. In the school system, physical resources are very much needed for effective teaching and learning. There is the need for classrooms, chairs, tables, desk, lockers, textbooks, chalkboards, white boards, notebooks, computers etc. these items are very necessary in the school system. They are very crucial to the overall success of the school academic programmes. The valuable nature of physical resources makes them easy to be quantified in order to determine whether they are adequate or not relative to their relevance in the school system (Agabi, 2014). Lawanson and Gede (2011) identified four classes of physical facilities: infrastructural facilities, recreational facilities, residential facilities and general purpose facilities.

- **Infrastructural facilities:** These are facilities that are directly utilized for teaching and learning. Examples are classrooms, desks, lockers, pupils' seats, libraries, visual teaching aids, audio-visual equipment, experimental gardens, laboratories and laboratory facilities. These facilities have direct bearing on the teaching/learning process;
- **Recreational facilities:** these include lawns, field, pitches, open spaces, equipment for sports and recreation.
- **Residential facilities:** Here, we have staff quarters, students hostel, hostel facilities, refectory and its facilities.
- **General-Purpose facilities:** Here, we have car parks, access roads, transportation facilities, empty lands etc.

Relevance of Physical facilities for Effective Implementation of UBE

Provision of physical facilities or resources in adequate quality and quantity is very important in the school system. Academic programmes cannot be successfully executed without them. According to Earthman (2002) inadequate physical resources in the school or their poor maintenance have negative influence on teachers' effectiveness. They also impact negatively on the academic performance of the students where they are not adequately provided. Asiabaka (2008) states that where there is a conducive environment for effective teaching and learning to take place, the school will record good attendance, increased teacher retention and improved students' academic performance. Studies by various scholars Asiabaka (2008) and Asodike (2005) have shown that where physical resources are not adequately available, the following could be observed:

- Poor academic performance by students;
- Poor attitude and disciplinary problems among staff and students;
- Poor concentration resulting from poor quality of air;
- High rate of absenteeism among staff/students;
- Low morale of teachers/students;
- Poor job satisfaction;
- Poor concentration and performance in the classroom;
- Over-crowding.

Utilization of Physical Resources

Utilization of physical resources involves putting available physical resources into use in accordance to their specifications. Resource utilization is as important as resource provision. There are four levels of physical resource utilization (Amaeze and Odunlade, 2013). They are:

- **Non-Utilization:** In this case, the facilities or resources are made available to the school but they are not put into use by the school.
- **Under-Utilization:** This refers to a situation where facilities are put to use but at a lower rate. They are not fully utilized. In other words, they are used below their capacity.
- **Optimal-Utilization:** In this case school facilities are effectively utilized. They are used according to their capacity and recommendations of the producers. They are used in a way that they contribute to effective teaching and learning in the school.
- **Over-Utilization:** In this case, the capacity utilization of the facilities is exceeded. The facilities are exposed to unnecessary pressure as a result of so much usage.

Observations and studies by scholars like Asodike (2005), Eke (2010) and Asiabaka (2008) showed that there is under provision of resources especially physical resources in public secondary schools in Nigeria. According to them, this situation is made worse by poor maintenance culture exhibited by public school administrators. Shortage of resources is a major problem. If a resource is utilized above its capacity, its usage becomes a problem. Where this is repeatedly experienced, the utilization of such a resource is being abused and this will increase wear and tear which in turn will reduce the life span of such a resource.

Factors Affecting Effective Utilization of Physical Resources

One of the factors which affect effective use of physical resources in secondary schools is the rate of enrolment. Increase in enrolment is known to put pressure on available physical resources while decrease in enrolment makes these resources to be underutilized (Ebong, 2006). It cannot also be argued that money plays a vital role in the provision, and maintenance of physical resources. Where there is adequate provision and maintenance of physical resources, effective utilization is more likely to be experienced than a situation where under provision and poor maintenance of physical resources are experienced (Ocho, 2006).

Staff and students attitude can affect the utilization of school resources. School facilities should be operated by those that have the technical know-how and experienced staff should be on ground to guide students in the utilization of school resources especially technical equipment.

According to Ukeje (2008), the misuse of school facilities by students prompted the introduction of caution fees by school managers.

METHODOLOGY

This study adopted a descriptive survey research design. Two research questions and one hypothesis guided the study. The population of the study was made up of all the 249 Junior Secondary schools (JSS) in Rivers State. A sample of 20 urban and 30 rural JSS as well as 30 male and 20 female JSS principals was drawn through stratified random sampling technique. This represented 20% of the entire population. Two instruments were used for data collection. One was a questionnaire designed by the researcher which was titled, “Factors Affecting the Utilization of Physical Resources in the Implementation of UBE Questionnaire (FAUPRIUBEQ)”. The questionnaire had 10 items structured in a 4 point rating modified likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The second instrument was an observation schedule on the utilization of physical resources in public JSS in Rivers State. Ten items were assessed based on their rate of utilization. The instruments were properly validated and the test retest approach was used for reliability testing of the questionnaire. It yields a reliability index of 0.78, calculated with Pearson Product Moment Correlation Coefficient. The reliability of the observation schedule was tested with the aid of Kudar Richardson (Kr_{20}) and a reliability index of 0.81 was obtained. Mean scores, percentages and rank order were used to answer the research questions while z-test was used to test the hypothesis at 0.05 alpha level of significance.

RESULTS

Research Question One: To what extent are physical resources utilized for effective implementation of UBE programme in Rivers State, Nigeria?

Table 1: Observation schedule on the utilization of physical resources in public JSS in Rivers State, Nigeria

S/ N	Physical Resource	Urban JSS N = 20			Rural JSS N = 30			Remarks
		Capacity Utilization	Average Utilization	UT Rate	Capacity Utilization	Average Utilization	UT Rate	
1.	Classrooms	40	59	158%	40	50	125%	Over UT
2.	Libraries	60	90	150%	20	45	225%	Over UT
3.	Laboratories	60	90	150%	40	60	150%	Over UT
4.	Computer Laboratory	40	60	150%	10	40	400%	Over UT
5.	Sick bays	4	12	300%	2	6	300%	Over UT
6.	Convenience	50	100	200%	40	80	200%	Over UT
7.	Introtech workshops	40	60	150%	25	45	225%	Over UT
8.	Staff rooms	8	24	300%	6	15	250%	Over UT
9.	School hall	200	300	150%	80	220	275%	Over UT
10.	Tables	1	2	200%	1	3	300%	Over UT

Data on table 1 shows the rate of utilization of some physical resources in urban and rural Junior Secondary Schools in Rivers State. The table shows that there is more pressure on physical resources in rural JSS than in urban JSS. All the physical resources assessed are over utilized

with the highest being. Computer laboratories in the rural JSS with an over utilization rate of 300% while the least are classrooms with over utilization rate of 25%.

Research Question Two: What are the factors affecting the utilization of physical resources for effective implementation of UBE programme in Rivers State, Nigeria?

Table 2: Mean scores, standard deviation and rank order of the male and female principals on the factors affecting the utilization of physical resources in public JSS in Rivers State, Nigeria

S/N	Factors Affecting Effective Utilization of Physical Resources	Male Principals N = 30		Female Principals N = 20		Mean Set	Rank Order	Remarks
		x_1	SD ₂	x_2	SD ₂			
1.	Inadequate Funding	3.28	0.62	3.26	0.68	3.27	2 nd	Agreed
2.	Surging Student enrolment	3.20	0.73	3.22	0.65	3.21	3 rd	Agreed
3.	Poor maintenance	3.06	0.68	3.10	0.61	3.08	5 th	Agreed
4.	Inadequate Provision of physical resources	3.56	0.70	3.44	0.70	3.58	1 st	Agreed
5.	Inadequate inspection of Physical resources	2.89	0.60	2.85	0.71	2.87	6 th	Agreed
6.	Indiscipline	2.54	0.66	2.58	0.67	2.56	9 th	Agreed
7.	Timely utilization of facilities	2.76	0.64	2.70	0.62	2.73	8 th	Agreed
8.	Lack of quality culture	2.90	0.69	2.80	0.59	2.85	7 th	Agreed
9.	High cost of materials	3.10	0.61	3.12	0.60	3.11	4 th	Agreed
10.	Cordial school/community relations	2.38	0.72	2.40	0.63	2.39	10 th	Disagreed
Aggregate mean and standard deviation.		2.97	0.67	2.95	0.65			

Data on table 2 show that all the items have mean score that were above the criterion mean of 2.50 except item number 10 which had a mean score of 2.39. Items 1 to 9 in the rank order of 1st to 9th were accepted because their mean set scores were greater than the criterion mean while item number 10 which also ranked 10th in the rank order was rejected because it had a mean score that was less than the criterion mean. Therefore the factors affecting effective utilization of physical resources for the implementation of UBE include: inadequate funding, surging student enrolment, poor preventive maintenance, inadequate physical resources, indiscipline, timely utilization of facilities, lack of quality culture and high cost of materials.

Test of Hypothesis

H₀₁: There is no significant difference between the mean scores of male and female principals on the factors affecting the utilization of physical resources for effective implementation of UBE programme in Rivers State, Nigeria.

Table 3: Z-test analysis of the difference between the mean scores of male and female principals on the factors affecting the utilization of physical resources for effective implementation of UBE programme in Rivers State, Nigeria

Status	X	N	S.D	df	z-calculated	z-critical	Remarks
Male Principals	2.97	30	0.67	48	1.24	1.96	Ho ₁ not significant
Female Principals	2.95	20					(Accept)

Data on table 3 shows the z-test analysis of difference between the mean response of the male and female principals on the factors affecting the utilization of physical resources for effective implementation of UBE programme in Rivers State. The calculated z-value of 1.24 is less than the critical z-value of 1.96, therefore the null hypothesis was retained. This implies that there is no significant difference between the mean scores of male and female principals on the factors affecting the utilization of physical resources for effective implementation of UBE programme in Rivers State.

DISCUSSION

The study revealed that there is over utilization of physical resources in both urban and rural JSS in Rivers State. The study also revealed that there is more pressure on physical resources in rural JSS than in urban JSS. These findings agree with the observation and investigations of scholars like Earthman (2002), Asodike (2005), Asiabaka (2008), and Eke (2010). These scholars have in their different studies identified inadequate provision of resources especially physical resources as a major factor confronting secondary schools in Nigeria. This situation is becoming worse by the day due to increase in enrolment which is not commensurately accompanied with a corresponding increase in resources provision. With the poor maintenance culture and poor funding of education especially UBE, there is so much pressure on available physical resources in rural JSS and urban JSS in Rivers State. In some JSS, students sit on bare floors to learn, the classrooms are leaking, there are no doors and windows. Some have sagging ceiling and cracked walls while high teacher/student ratio and high congested classrooms are the order of the day. These issues have negative impacts in the implementation of UBE programmes in Rivers State.

The study also revealed that the factors affecting the utilization of physical resources for effective implementation of UBE programmes in Rivers State are: inadequate funding, surging student enrolment, poor preventive maintenance, inadequate physical resources, indiscipline, timely utilization of facilities, inadequate quality culture and high cost of materials. These findings agree with Ebong (2006), Ocho (2005) and Ukeje (2008). These scholars have in their different works expressed the influence of increased students enrolment as a result of the realization of the benefits of education and the free UBE programme on physical resource utilization in public JSS. This situation is not equitably followed with increase in the provision of physical resources or adequate maintenance of existing ones. This is equally worsened by indiscipline and non challant attitude of students in the use of school properties. School properties are seen as public properties which belong to nobody hence they are carelessly handled by the students.

CONCLUSION

Physical resources which are very important in the implementation of UBE programme are not adequately provided in JSS in Rivers State. This has resulted to the over utilization of available ones. Adequate preventive maintenance culture should be adopted in other to sustain the life span of available physical resources in our JSS in Rivers State. School administrators equally need to ensure that discipline and careful attitude are displayed by all users of physical resources in our JSS.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Universal Basic Education should be properly funded by the government in other to enhance its effective implementation.
2. Increasing enrolment into basic education level should be accompanied by increase in provision of physical resources and proper maintenance of available ones.

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