

## AVAILABILITY OF PHYSICAL FACILITIES FOR IMPLEMENTATION OF UNIVERSAL BASIC EDUCATION IN JUNIOR SECONDARY SCHOOL OF EBONYI STATE, NIGERIA

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### ABSTRACT

This study assessed the level of available physical facilities for the implementation of Universal Basic Education (UBE) in junior secondary schools of Ebonyi State, Nigeria. The study adopted descriptive survey research design. The study population comprised all the 221 junior secondary schools in the State. Checklist was used to generate data. The checklist was designed to collect the inventory of available physical facilities in JSS in Ebonyi State. The checklist was face validated by three experts, one from measurement and evaluation, two in Educational Administration of Ebonyi State University which was subjected to test of reliability using Kendal's coefficient of concordance. Data collected were analysed using frequency and simple ratio based on the minimum standard (benchmark) for establishing schools while the research hypothesis was tested using chi-square test of independence. The result of the study revealed that available physical facilities in JSS in Ebonyi State are generally inadequate except staffrooms. However, schools located in urban areas have more physical facilities than schools in rural areas. The study observed that the inadequacy of available physical facilities in junior secondary schools in Ebonyi State hinders the implementation and attainment of the UBE goals. However, the inequality in the allocation of educational resources which favoured schools located in urban areas to the detriment of rural schools implies that students in urban schools will benefit more from the UBE programme and subsequently perform better than students from schools in rural areas academically. Based on the findings, it was recommended that Parent Teachers Association (PTA), non-governmental organizations (NGOs), philanthropists should assist the government in providing physical facilities in junior secondary schools.

**Keywords:** Physical facilities, Universal Basic Education programme, minimum benchmark, junior secondary school, Ebonyi state.

### INTRODUCTION

The federal and state governments are responsible for all educational policies, especially policies governing quality in education, adequacy of staff and equipment, staff discipline, the curriculum, evaluation of learning, financial administration and in general ensuring that the national objectives of education are pursued. In order to achieve the educational objectives, the Federal and State Governments established some parastatals and institutions such as the Universal Basic Education Board (UBEB), National Council in Education (NCE), Joint Consultative Committee on Education (JCCE), Local Education Authority (LEA) among others which are charged with the responsibility for ensuring that educational policies are being implemented at various levels of the educational system. Thus, government policies, intentions and purposes reach down to all pupils, students and adults in the education system.

The Federal Republic of Nigeria (2004) in her National Policy on Education (NPE) in line with the 1979 constitution made education a right for all Nigerians irrespective of class, religion and ethnic origin. In pursuance of the aforementioned objective, the Federal Government, through the Federal Ministry of Education has, from time to time introduced different educational reforms and programmes with the aim of realizing its objectives. One of such programmes for educational reform is the Universal Basic Education programme (UBE).

The Universal Basic Education programme of the Federal Republic of Nigeria was launched by Olusegun Obasanjo on 30<sup>th</sup> September, 1999 in Sokoto with a view to expand the focus and scope of the Universal Primary Education (UPE) scheme of 1976. Otaru (2015) stated that the UPE was introduced with a view to eradicate illiteracy, inculcate numeracy and life skills. However, it failed to achieve its aims and objectives due to poor implementation among other reasons which resulted in the increase in the rate of drop-outs among pupils. Alutu and Ochuba (2000) argue that Universal Basic Education was born out of the need to make basic education accessible to all and sundry and eradicate illiteracy.

Ehijieme in Okoro (2014) opines that Universal Basic Education in the Nigerian context is a close expression of formal, non-formal and informal approach and mechanism necessary for development of the human potentials. This was further highlighted as Universal Basic Education's mission statement by Adepoju and Fabiyi (2007). Jaiyeoba (2007, p21) stated that "Universal Basic Education covers the first 9 years of formal education that is six (6) years of primary education and three (3) years of Junior Secondary Education and in addition also caters for adult literacy and vulnerable groups through non-formal governmental programmes". Furthermore, Anaduaka and Okafor (2013) stated that UBE is an open and free educational programme aimed at

eliminating any sort of discrimination either political, socio-cultural and environmental that deprives the Nigerian child from acquiring basic education. According to her, UBE is open to all citizens irrespective of ethnic, culture or location.

According to the “implementation guidelines” released by the Federal Ministry of Education in February 2000, as reported by Okoro (2014), the UBE aims at achieving the following specific objectives:

- (i) Develop in the citizenry a strong consciousness for education and a strong commitment to its vigorous promotion.
- (ii) Provide free, compulsory Universal Basic Education for every Nigerian child of school age.
- (iii) Reduce drastically drop-out rate from the system through improved relevance and efficiency.
- (iv) Cater for drop-outs and out-of-school children / adolescents through various forms of complementary approaches to the provision and promotion of basic education.
- (v) Ensure the acquisition of the appropriate levels of literacy, numeracy, manipulative and life skills (as well as ethical, moral and civic values) needed for laying the foundation for life-long learning.

Ezeonu (2010) reported that the above UBE objectives (i), (ii), (iii) and (iv) had been achieved to a considerably moderate extent while objective (v) is very minimal. He argued that the degree of achievement of the objectives is more realizable in urban than in rural areas because there is still increase in the number of drop-out and illiterate manpower in the rural areas. However, among the five UBE objectives, only the first objective has been achieved to a large extent in rural areas. In the same vein, Adeniran (2005) noted that the rural dwellers have realized that education and its application (skills) is power but stated that UBE programme is not free to an average villager. According to him, the rural dwellers are poor and have no money to afford learning materials like desk, school uniform and even food among others for their pupils as they must feed well for learning to be assimilated.

Anike and Tari (2011) defined physical facilities as those things that enable the teacher to do his work very well and helping the learners to learn effectively. For example, the chalkboard facilitates imparting information on the learner. The above is in line with Peretomede (2001), who asserts that educational facilities are those materials that gives a good teacher an opportunity to achieve a level of instructional effectiveness. Furthermore, Olagboye (2004:p3) noted that “educational facilities consist of audio and visual aids, graphics, printed materials, display materials and consumable materials, other include physical resources such as land, buildings, furniture, equipment, machineries, vehicle, electricity, and water supply infrastructure while human resources are manpower in the school like teachers, principals and others.” Thus, physical facilities are available and accessible resources, useful for teaching, learning and assessment of pupils/students in school which are vital to the achievement of the goals of UBE programme.

Emphasizing on the need for school facilities, Ajayi and Adeyemi (2011) maintains that for standard education in Nigeria to be attained, the Nigerian education system needs sufficient facilities such as classroom blocks, furniture, laboratory, instructional material, libraries and other equipment. According to them, the above facilities are expected to be provided and equitably distributed among the schools irrespective of location for effective teaching and learning to take place.

Prior to the introduction of UBE in 2000 by the Federal Government, Ebonyi State Government had introduced free education to all inhabitants of the state from primary to secondary school level. This was aimed at providing all residents of the state of school age the opportunity to have access to basic education at no cost. The aim was to eradicate illiteracy in the State; equip her citizens with skills to compete favourably with their contemporaries from other States, thereby removing the tag that the State is educationally disadvantaged. This brought about tremendous increase in enrolment of pupils in State public primary and secondary schools (Alumode, 2005). This provided a fertile ground for the Universal Basic Education when it was launched. This laudable venture was sustained by the second Executive Governor, Chief Martins N. Elechi, but it appears that majority of the products and beneficiaries of this programme are not performing as expected.

A cursory observation shows that there is increasing mass exodus of pupils and students from public schools to private schools despite allegation that that private schools are fertile ground for examination malpractice. It therefore seems that absent/inadequacy of physical facilities in public schools in Ebonyi State is the root cause of this drift. For instance, schools’ dormitories, libraries, laboratories, desk and chairs among other teaching and learning facilities are in near absent in most public schools and where available, are in sorrow state. Alluding to this fact, Ebonyi Secondary Education Board (2014) in their report revealed that many well to do parents in Ebonyi State do not enroll their children in public secondary schools, alleging that public secondary schools’ educational facilities are inadequate for teaching and learning. Moreso, students from public secondary schools perform poorly in internal and external examination, thus necessitating this study because there seems to exist no empirical study conducted on this in Ebonyi State. This study therefore sought to assess the level of availability of physical facilities and equipment in junior secondary schools in Ebonyi State. Specifically, the objectives were to: find out the level of availability of physical facilities for implementation of UBE in JSS in Ebonyi State; and investigate the extent to which the level of availability of physical facilities and equipment for the implementation of UBE in Ebonyi State depend on school location.

### Research Questions

The following research questions guided this study:

1. What is the level of availability of physical facilities for implementation of UBE in JSS in Ebonyi State?
2. To what extent do the level of availability of physical facilities and equipment for the implementation of UBE in Ebonyi State depend on school location?

### Hypotheses

The following hypotheses guided the study and were tested at an alpha level of 0.05

**HO<sub>1</sub>:** The level of availability of physical facilities and equipment for the implementation of UBE in Ebonyi State does not depend significantly on school location

### Theoretical Review

#### Extent of Availability of Educational/School Facilities

Availability according to Ibrahim in Asogwa *et al.* (2013) is the condition obtainable or accessible in any given time. Asiyai (2012:p9) defined school facilities "as materials, resources that enhance teaching and learning thereby making the process meaningful and purposeful." It refers to the entire school plant which administrators, teachers, and students make use of, share and utilize for effective administration and efficient management of school for purposeful teaching and learning experience.

In her own view, Emetarom (2004) saw school facilities as that physical equipment that assists and enable teaching and learning in other to enhance results. She noted that such facilities function as the fulcrum for which teaching and learning are pleurably built. In the same vein, Abdulkareem (2000) defined educational facilities as non-human and non-financial resources that comprise movable and immovable materials that enhance teaching and learning.

Furthermore, Adeyemi and Adu (2010:p23) stated that "school facilities are the materials, resources that facilitate effective teaching and learning in the school." They emphasized that good facilities are very important in education. Aghenta (2000:p17) described UBE facilities as "those teaching materials; some real, some graphic, not solely dependent upon words as a predominant source of meaning for the observer."

Ojedele (2004) identified three components of educational facilities to include physical facilities, instructional facilities and school physical environment. According to him, school infrastructure includes buildings, playgrounds. He noted that instructional facilities include teaching and learning materials, equipment and furniture while physical environment is made up beautification of the school.

Adeyemi and Adu (2010) reported that there was severe shortage of physical facilities in public schools in Ekiti State which is an indication that schools were not physically ready for the UBE programme. This is in line with Okebukola (2003), who maintained that facilities on ground are grossly inadequate for the implementation of UBE programme. Supporting this view, Okpalaoka (2009) stated that structures of most of the schools are worn out and there are visible signs of leaking roofs, inaccessible routes, poor aesthetics, classrooms without windows and doors, dusty floor with little or no desks and chairs. He noted that the infrastructural decay in schools have made the environment not conducive for learning as pupils are seen under trees receiving lessons.

Stating the importance of educational facilities, Edling and Paulson in Muiyiwa and Quadri (2012:19) asserts that "facilities enable students to acquire knowledge, skill, attitude which includes graphics, photographic electronics such as tapes or mechanical means of arresting, processing and re-consisting visual and verbal information." Supporting this, Nwagwu, Obanya and Adeyemi in Muiyiwa and Quadri (2012) agrees that to realize a strong educational background, the Nigeria educational system needs sufficient facilities such as blocks of classrooms, furniture and so on.

Furthermore, Ohuche in Oruwari (2012) observed that there are several uncompleted structures and damaged chairs, classrooms are devastated, grounds are untidy and lawns are not mowed regularly. Toilet facilities where they exist are inadequate, primary and secondary school teachers do not have comfortable teachers' room or office. This is in line with Ikoya and Onoyase (2008) who assert that despite huge fund annually budgeted and expended on UBE programme in Nigeria, there are indications that several schools are still plagued with inadequate physical facilities for effective implementation of UBE.

Adeyemi in Adeyemi and Adu (2010) emphasized that educational facilities are the major instrument that contribute to students' academic development in schools. These facilities include; school buildings, classrooms, furniture, libraries, recreational equipment and so on. According to them, facilities are the materials and resources that facilitate learning in schools and their importance cannot be overemphasized.

Buttressing this, Fadipe in Adeyemi (2011) stated that the good structure in school environment, which represents some measure of comfort and safety and it enhance the performance of pupils in school. According to him, there should be adequate lightning, ventilation and well-furnished with good desk and seats. In the same vein, Anike and Tari (2011) reports that school facilities required for effective execution of the UBE programme are grossly inadequate especially in rural areas. Anike and Tari (2011) reports that school building in some

communities is in dilapidated state, some de-roofed for years which shows a state of total neglect. Anike and Tari (2011) argued that “majority of the UBE schools have not been equipped with computer which will afford the learner the opportunities for developing manipulative skills that will enable the child to function effectively in the society within the limits of the child’s capacity.”

Commenting further on the state of facilities in schools, Owuamanam (2005) noted that inadequacy of infrastructural facilities were major problems facing Nigeria educational system. According to him, the school facilities available were grossly inadequate to match the students’ population. Supporting this, Asiyai (2012) stated that scholars, researchers, administrators and educational planners confirmed that school facilities in Nigeria schools are inadequate and fall short of international standard. This confirmed Ikoya and Onoyase’s (2008) report that only 26% of secondary schools across the country have inadequate infrastructures. Stressing further, Ajayi and Adeyemi (2011) writes that World Bank report on secondary and primary school in Africa shows a sorry picture which Nigeria is one of them.

Consequent on the above state of educational facilities, Anike in Lawanson and Gede (2011) described school facilities as tools of a workman in the hand of a teacher which must be provided and kept in good condition to enhance learning and its absence implies the non-existence of any set up that may be referred to as school. Thus, Ajayi and Adeyemi (2011) emphasized that the probability of the success of any curriculum is very low without the provision of the necessary facilities and other materials such as textbooks and audio-visual aids.

Furthermore, Ememe, Onwuchekwa and Onuigbo (2012) found that there is no significant difference between the mean ratings of teachers in urban and rural schools on the availability of physical facilities in public schools in Abia State. On the contrary, Asiabaka and Mbakwem (2008) reported that only one school located in the urban area had physical facilities such as V.I.P latrines, music equipment and block walled buildings. However, they found out that schools located in rural areas have more farmland/garden for farm demonstration.

### **Theoretical Framework**

The theories review for this study focused on system theory and behavioural/human relation theory as explained below:

#### **System’s Theory**

Ludwig von Bertalanffy (1920) is among the proponents of the theory. The system emphasized the science of wholeness. The assumption of the theory is that “the whole is more than the sum of its parts”. Systems theory is concerned with correlation of input, output and outcomes. This theory believes that what happens in the system is measured by changes observed in the outputs in relations to the outcomes or goals of the system.

Ludwig von Bertalanffy’s conception of system’s theory was one of organization. According to him system’s theory serves as an organizing conceptual framework or meta theory. He saw it as a component part of a larger organism. Thus system’s theory is an organizational theory that looks at interactions between systems. Explaining this approach he stated that system’s approach to management views organization as a social system or entity composed of interrelated parts acting together as a unitary whole which enables inputs to be converted into outputs. Furthermore, Olagboye (2004) stated that when applied to organization, inputs refer to people, materials, information and finance which are organized and activated such that human skills and raw materials are converted into products, services and other related outputs which are discharged into the environment.

This theory provides a framework for describing and analyzing different parts of organization as well as framework within which to plan and anticipate outcomes in educational organization. Thus, application of this theory/approach will ensure effective coordination and interaction between the government, teachers, pupils, facilities, educational planners and others, which will be measured through the products. It will also provide feedback for improvement so as to achieve the set educational goals in general and UBE goals in particular.

The present study is anchored on the premise that school is a system made up of the inputs-human and material resources. These resources include teachers, funds, pupils, school facilities among others. The duties and functions of these resources are correlated and interact to effect teaching and learning in school which produce outcome in form of graduates of the UBE programme. The graduates are expected to have acquired basic skills, competences and change in behaviour to enable them contribute to the growth and development of the country. The result of the synergy is measured by the product which is the learner (graduates and products of the UBE).

### **METHODOLOGY**

The research design adopted for this study was descriptive survey. This study was carried out in Ebonyi State of Nigeria. The State is bounded on the West by Enugu State, on the North by Benue State and on the South by Abia State and Cross River State. Ebonyi State is made up of three Education Zones, namely: Abakaliki, Afikpo and Onueke zones. The indigenes are predominantly farmers, traders and civil servants. Ebonyi State has been classified among the educationally disadvantaged States. Hence, the need for this study to

establish in practical terms, what has been done and what needs to be done in order to realize the set objectives of UBE in the State.

The population of this study comprised all the 221 public Junior Secondary Schools in Ebonyi State and the data was collected from 221 Vice Principals (Planning, Research and Statistics Department (PRS), Ebonyi State Universal Basic Education (UBEB) Abakaliki, 2013). The entire public junior secondary schools in Ebonyi State were used for the study. Thus, there was no sampling because of the smallness of the population (221). Therefore, the 221 junior secondary schools in the State were used in this study.

The checklist was used to collect data from the 221 junior secondary schools for this study. The check list has two parts. Part A dealt on the data of the schools while part B contained the items that were adopted from the minimum standard for establishing schools. Frequency count was used to collect data on the available number of physical facilities and equipment based on subjects covered in the public junior secondary schools. The minimum benchmark of the Ministry of Education was used in designing the instrument so that the level of availability (adequacy) of physical facilities could be easily ascertained.

The face validation of the instrument was done in the Department of Educational Foundations and Department of Science Education (Measurement and Evaluation) in Ebonyi State University. Two experts from Educational Administration and one expert from measurement and evaluation scrutinized the instrument and made important and useful suggestions on the instrument. Afterward, modifications were made in line with the recommendations of the specialists.

To ensure consistency in the data collection with the checklist, four research assistants were engaged and trained on the use of the checklist. In addition the consistency of the raters (research assistants) were determined using an inter rater reliability procedure. Specifically the Kendal's Coefficient of Concordance was adopted in this study. The ratings of schools were collected, ranked and subjected to Kendal's Coefficient of concordance. Summary of the inter-rater consistency test indicates that the checklist yielded inter rater reliability index of 0.90, which shows high internal consistency. Research questions were answered descriptively using frequencies and simple ratio while the null hypotheses were tested at 95% confidence level using the Chi-Square test of independence.

## RESULTS

**Research Question 1:** *What is the level of availability of physical facilities for implementation of UBE in JSS in Ebonyi State?* The data collected on the above were analysed based on the minimum benchmark. Summary of result is presented on Table 1.

**Table 1:** *Level of Available Physical Facilities for Implementation of UBE in JSS in Ebonyi State*

S/N	Physical facilities	No. of physical facilities available	Present Enrolment of pupils	No. of schools	No. of teachers in post	Bench mark	Observed ratio	Decision
1.	Classrooms (9m x 12m x 3m)	1389	75397	221	2429	1:35 pupils	1:54	Inadequate
2.	Staffrooms	210	“ “	221	2429	1:1 school	1:1	Adequate
3.	Library	55	“ “	221	2429	1:1 school	1:4	Inadequate
4.	Tables & chairs	1527	“ “	-	2429	---	1:2	Inadequate
5	Laboratory	6	“ “	221	2429	2:1 school	1:36	Inadequate
6	Workshops	12	“ “	221	2429	2:1 school	1:18	Inadequate
7	Desk	1083	75397	-	2429	1:1 pupil	1:70	Inadequate
8	Recreational facilities	239	-	221	2429	2:1 school	1:1	Inadequate
9	Sources of water supply	73	-	221	2429	---	1:3	Inadequate
10	Convenience	13	-	221	2429	4:1 school	1:17	Inadequate
11	School clinic	8	-	221	2429	1:1 school	1:27	Inadequate
12	Electricity/ Generator set	18	-	221	2429	---	1:12	Inadequate

The result on table 1 above reveals that only available staffrooms in JSS in Ebonyi State is adequate at a ratio of 1:1 school while the following physical facilities were available at the ratios shown below: classrooms – 1:54 pupils, library – 1:4 schools, tables and chairs – 1:2 teachers, laboratory – 1:36 schools, workshop – 1:18 schools, desk – 1:70 schools, recreational facilities – 1:1 school, sources of water supply – 1:3 schools, convenience – 1:17 schools, school clinic – 1: 27 schools and electricity/ power generating set – 1:12 schools.

These showed that the available physical facilities were inadequate because the ratios revealed above did not meet the minimum benchmark.

**Research Question 2:** *To what extent does the level of availability of physical facilities for the implementation of UBE in Ebonyi State depend on school location?* Data collected on this were separated for urban and rural schools which were analysed based on the minimum benchmark. Summary of result is presented on Tables 2-11 for the various facilities and equipment.

**Table 2: Classrooms**

Location	Enrolment of pupils	No. of classrooms	Benchmark	Observed ratio	Remark
Urban	10300	319	1:35	1:32	Adequate
Rural	65097	1041	1:35	1:62	Inadequate

The result on Table 2 above revealed that schools located in the urban areas have 319 classrooms at a ratio of 1:32 pupils, which is adequate while schools located in the rural areas have 1041 classrooms at a ratio of 1:62 pupils/students. This is above the stipulated benchmark of 35 students per a class and is inadequate.

**Table 3: Staff Rooms**

Location	No. of staff classrooms	No. of schools	Benchmark	Observed ratio	Remark
Urban	15	15	1 per school	1:1	Adequate
Rural	195	206	“ “	1.1	Adequate

The result on Table 3 above revealed that schools in the urban areas have 15 staffrooms at a ratio of 1 is to one school while schools in the rural areas have 172 staffrooms at a ratio of 1 is to 1 schools. This facility is adequate in schools in urban and rural areas.

**Table 4: Library**

Location	No. of library	No. of schools	Benchmark	Observed ratio	Remark
Urban	15	15	1 per school	1:1	Adequate
Rural	40	206	“ “	1:5	Inadequate

The result on Table 4 above reveals that schools located in the urban areas have 15 libraries at a ratio of 1:1 while schools located in the rural areas have 40 libraries at a ratio of 1:5 schools. The schools located in rural areas have inadequate libraries.

**Table 5: Tables and Chairs**

Location	No. of tables	No. of teachers in post	Benchmark	Observed ratio	Remark
Urban	525	483		1:1	Adequate
Rural	1002	1931		1:2	Inadequate

The result on Table 5 above showed that schools located in the urban areas with 525 teachers have 483 tables and chairs at a ratio of 1:1 while schools in the rural areas with 1931 teachers have 1002 tables and seats at a ratio of 1:2 teachers.

**Table 6: Laboratory**

Location	No. of schools	No. of laboratories	Benchmark per school	Observed ratio	Remark
Urban	15	04	2:1	1:4	Inadequate
Rural	206	02	2:1	1:103	Grossly inadequate

The result on Table 6 revealed that schools located in the urban areas have 04 laboratories with a ratio of 1:4 schools while those located in the rural areas have 02 laboratories at a ratio of 1:103 schools which is inadequate.

**Table 7: Workshops**

Location	Workshop	No. of schools	Benchmark	Observed Ratio	Remark
Urban	10	15	1:1	1:1.5	Inadequate
Rural	2	206	1:1	1:103	Inadequate

The result on Table 7 revealed that schools located in the urban areas have 10 workshops at a ratio of 1:1.5 schools while those in the rural areas have 2 workshops revealing a ratio of 1:103 schools which is inadequate.

**Table 8: Desk**

Location	Enrolment of pupils	No. of desk	Benchmark	Observed ratio	Remark
Urban	10300	80	1:1	1:129	Inadequate
Rural	65097	1003	1:1	1:65	Grossly inadequate

The result on Table 8 revealed that schools in the urban areas have 80 with a ratio of 1:129 pupils while schools in the rural areas have 1003 desks at a ratio of 1:65 pupils which is grossly inadequate. It was observed that majority of the pupils have personal lockers and seats provided by their parents/guardians.

**Table 9: Recreational Facilities**

Location	No. of schools	No. of Recreational Facilities	Bench mark	Observed ratio	Remark		
		Football pitch	Volleyball court	Tennis tables & batons			
Urban	15	15	15	3	2:1	2:1	Adequate
Rural	206	206	10	-	2:1	1:1	Inadequate

The result on Table 9 above revealed that schools in the urban areas have 15 football pitches and 15 volleyballs, 15 volleyball courts and 3 table tennis tables + batons at a ratio of 2:1 and is adequate while those located in the rural areas have 206 football pitches and 10 volleyballs and 185 table tennis tables at ratio of 1:1, which is inadequate.

**Table 10: Source of Water Supply**

Location	No. of pipeline/taps	No. of Borehole	Streams	Well	No. of schools	Bench mark	Observed ratio
Urban	-	8	-	-	15	-	1:2 schools
Rural	-	55	40	10	206	-	1:955 schools

The result on Table 10 above revealed that in the urban schools there are 8 boreholes in use while in the rural schools 55 boreholes, 10 well and 40 streams were used as sources of water. In accordance with the benchmark, the approved sources of water are boreholes, well and pipe borne water. Hence, the available sources of water is at a ratio of 1:2 schools and 1:955 schools in urban and rural schools respectively. None of the schools have functional pipe borne water supply.

**Table 11: Conveniences**

Location	No. of Water VIP/ cistern	Benchmark VIP/W cistern	Students enrolment	Observed ratio	Remark
Urban	8	1:50	10300	1:1288	Inadequate
Rural	5	“ “	65097	1:13019	Inadequate

The result on Table 11 above revealed that schools in the urban areas have 8 water cistern toilets at a ratio of 1:1288 pupils while schools located in the rural areas have 5 toilets at a ratio of 1:13019 pupils which is inadequate.

**Table 12: School Clinic**

Location	No. of schools	No. of clinic	Benchmark	Observed ratio	Remark
Urban	15	5	1:1	1:3	Inadequate
Rural	206	3	1:1	1:69	Inadequate

The result on Table 12 revealed that schools in urban areas have 5 school clinics at a ratio of 1:3 schools while schools in the rural areas have 3 school clinics at a ratio of 1:69 schools, which is below the required benchmark ratio of 1:1 and is inadequate.

**Table 13: Electricity/Power Generating Sets**

Location	No. of power generating sets	No. of schools	Observed ratio	Decision
Urban	10	15	1:1.5	Inadequate
Rural	8	206	1:26	Inadequate

The result on Table 13 revealed that schools in the urban areas have 10 power generating sets at a ratio of 1:1.5 schools while those in the rural areas have 8 power generating sets at a ratio of 1:26 school. It was that schools located in the urban areas have access to electricity but majority were disconnected due to none payment of electricity bills while majority of the schools in rural areas do not have access to electricity.

**Hypotheses**

**HO<sub>1</sub>:** The level of availability of physical facilities and equipment for the implementation of UBE in Ebonyi State does not depend significantly on school location. Data collected on this were based on school location (Urban and Rural) and subjected to chi-square test of independence at an alpha level of 0.05.

**Table 14: Chi-Square Test of Independence of the Level of Availability of Physical Facilities for Implementation of UBE on School Location**

Location	Classrooms	Library	Tables/Chairs	Laboratory	Workshops	Desks	Recreational Fac	Sources of Water	Conveniences	School Clinic	Hostels	Staffrooms	X <sup>2</sup> calculated	alpha	X <sup>2</sup> Critical	Decision
Urban	319 (303.60)	15 (12.27)	525 (340.77)	04 (1.34)	10 (2.68)	80 (241.68)	30 (54.89)	08 (16.29)	08 (2.90)	05 (1.79)	10 (4.02)	15 (46.86)	387.04	0.05	19.68	Reject Null Hypothesis
Rural	1041 (1056.49)	40 (42.73)	1002 (1186.23)	02 (4.66)	02 (9.32)	1003 (841.32)	216 (191.10)	65 (56.71)	05 (10.10)	03 (6.21)	08 (613.98)	195 (163.14)				

Summary of data analysis presented on Table 14 shows that the Chi-Square calculated value is 387.04 while the critical value at 95% confidence level is 19.68. The decision rule is to reject the null hypothesis when the calculated Chi-square value is greater than the critical value. Based on this the null hypothesis was rejected and concludes that the level of availability of physical facilities and equipment for the implementation of UBE in Ebonyi State depends significantly on school location.

**DISCUSSION**

**Adequacy of Available Physical Facilities**

Tables 1, 2-13 and 14 provided answers to research questions 1, 2 and hypothesis which sought to determine the level of availability of physical facilities and their adequacy for the implementation of UBE programme and whether the availability is dependent on location. The result of this study revealed that JSS in Ebonyi State have staff rooms that is adequate for the implementation of UBE based on the bench mark ratio. However, other facilities like classrooms, libraries, tables and chairs, laboratories, workshops, desks, recreational facilities, sources of water supply, conveniences, school clinics and power generating sets were available but not adequate for the implementation of UBE programme.

Furthermore, the analysis revealed that available staff room, tables and chairs, classrooms and libraries were adequate in schools located in urban areas only, but inadequate in schools located in rural areas, while the



following facilities laboratory, workshops, desks, recreational facilities, source of water conveniences, school clinic and power generating set were inadequate in both urban and rural schools.

The above facilities were available in JSS in the State at a ratio which is lower than the stipulated minimum standard of Ministry of Education (benchmark) from which the basis for the decision was derived. This implies that the available ones are grossly inadequate for the present enrolment of pupils/students in the schools. Moreso, it was observed during this study that some of the available facilities were old and dilapidated. It was also observed during this study that due to inadequate available desks, pupils/students have personal lockers and seats provided by their parents/guardians.

The above scenario appears to reveal government inability to provide the needed physical facilities for the implementation of UBE programme in the State or it could be due to poor maintenance of the facilities by the schools principals, teachers and students. It may also be as a result of underestimation of the expected population of pupils into the free and compulsory UBE programme in the State. The above findings are in line with Mbakwem and Asiabaka (2007) who emphasised on the unhealthy nature of the uncompleted, old and antiquated, sometimes dilapidated buildings, overcrowded and uncondusive classrooms, unsightly and unhygienic toilets, inadequate laboratories and workshops.

The result is therefore in tandem with Asiyai (2012) whose study revealed that school facilities in public secondary schools in Delta State are generally in a state of disrepair. Asiyai however, noted that those in the South senatorial district being in a more terrible state than others. This result is in line with Adeogun (2007) who reported that facilities in public schools in Ekiti State were in a state of disrepair.

Buttressing the unhealthy nature of available physical facilities, Ikoya and Onoyase (2008) had reported that only 26% of secondary schools across the country have infrastructure in adequate quality and quantity. He also stated that scholars, researchers, administrators and planners have continued to maintain that school facilities in Nigeria schools are inadequate and available ones are being over-utilized due to astronomical increase in school enrolment.

It is not surprising therefore that Garuba (2003) stated that the Nigerian teacher operates from a deficient environment where teaching and learning is seriously unpremeditated especially in the rural communities. Nwafor (2012) stated that in some rural schools learning is still carried out under shades. She noted that the migrant farmer's schools at Ekwegbe-Agu and Obama-Enu in Enugu State have school blocks made of palm leaves, which is a hinderance to the implementation of UBE. Moreso, Ossai and Nwalado (2012) stated that inadequate provision of infrastructure (class rooms) chairs/desks for the benefit of the people has caused over-crowding in the schools and as a result, sickness and ill-health are transmitted easily making the students not to benefit from the programme. In the same vein, Igboanugo (2004) stated that some athletes have dropped out of training because some facilities are either non-existent or inadequate, thereby frustrating the efforts to catch them young and prepare them as future champions.

## Conclusion

Based on the findings, the study concludes that the existing physical facilities available for implementation of Universal Basic Education (UBE) programme in junior secondary schools in Ebonyi State were grossly and generally inadequate. Consequently, the noble goals and objectives of UBE programme in Ebonyi State have been seriously constrained by the absence of physical facilities. The study advocates aggressive provision of physical facilities to effectively enhance the implementation of UBE programme in the State. This would help to reverse the declining academic performance of students and ensure conducive environment for teaching and learning in junior secondary schools in Ebonyi State and Nigeria in general.

## Recommendations

- (1) The observed non-existing and inadequate physical facilities should be provided by the government if the objectives of UBE programme must be achieved. This will facilitates effective implementation of the UBE programme.
- (2) The PTA, NGOs and philanthropists should assist the government in the provision of physical facilities as a way of facilitating effective implementation of UBE programme.
- (3) The vice principals and teachers in junior secondary schools should imbibe maintenance culture so as to prolong the durability of available physical facilities in the schools.

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