# Availability and Utilization of Physical Facilities in Abia State Primary Schools

# By

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#### Abstract

This study sought to determine the availability and utilization of physical facilities in primary schools in Abia State. Descriptive survey design was used. The population consisted of all the1230 serving head teachers in public primary schools in Abia State. The schools were later stratified into urban and rural. Out of a total of 1230 head teachers, a sample of 123 representing 10% of the entire population was drawn through the stratified random sampling technique. A questionnaire titled "Availability and Utilization of Physical Facilities" was administered to the respondents. Two research questions and two null hypotheses were formulated to guide the study. Interview, document analysis and observations were also used. Mean

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was used to answer the research questions while t-test was used in testing the hypothesis. The results showed that physical facilities are inadequate and in some cases not available. Some of the facilities are over-utilized while others are under –utilized. Pupils will perform better when all these facilities are provided and utilized. Some recommendations were made and suggestions proffered.

For sometime now, there has been high rate of failure in examinations both internal and external by the primary school pupils in Abia State. Many education stake holders are not happy. Some even blamed the teachers for the failure of pupils to excel in examinations. To save the primary education from total collapse, the Federal Government set up a nation-wide retraining workshop for overall professional development of all primary school teachers in the country. This is in a bid to achieve universal primary education which is one of the Millennium Development Goals in Nigeria. This nation-wide teacher development workshop has given the teachers opportunity to gain both subject matter knowledge and pedagogical skills. On coming back to their schools, they are expected to put into practice what they learnt. One the things that would help them impart knowledge to the pupils are physical facilities. On the other hand, while the government blames the teachers for not been committed to duty, the teachers blame the government for not providing the physical facilities that will help them impart knowledge to the pupils. Ndu, Ocho & Okeke (1997) defined physical facilities are those facilities provided by the schools for the purpose of enhancing teaching and learning. It includes the classrooms, buildings, laboratories, laboratory equipment, the school furniture, the chalk board, tools and machines, audio and audio visual aids etc. The importance of physical facilities for the achievement of the Millennium Development Goals cannot be over-emphasized. They help to promote teaching and learning in schools. The availability of quality physical facilities in schools will attract the admiration of the members of the community. Ndu, et al (1997) and Enaohwo and Eferekaya (1989) emphasized the importance of physical facilities on teaching and learning. Furthermore, Ndu et al (1997) stated that research findings have shown that there is a positive relationship between the academic performance of pupils in schools and the availability and nature of the physical facilities. They opined that learning takes place better and faster in a school environment with high level of buildings, accommodation, furniture, and equipments than in an environment where these items are lacking. And that teachers teach in a well -equipped school, with accommodation and facilities than when the facilities are lacking. Supporting the above, Ebong (2006) reiterated that effectiveness can only be realized if the materials available are put to use. These observations show that that effective teaching and learning cannot take place without adequate physical facilities. Teachers cannot teach effectively without these facilities. Castaldi (1987) pointed out that the adequacy of school facility is measured by the extent to which it satisfies the requirements of the school programme. Therefore, the availability and utilization of the physical facilities

will enhance teaching and learning leading to the achievement of Millennium Development Goals in Education.

Adeogun (1999) stated that physical facilities are made up of school plant which includes classrooms, offices, recreational facilities and the entire school grounds. It also includes material resources such as instructional materials, stationeries, educational plans and objectives and prescribed methodology. Enaohwo and Eferekaya (1989) classified physical facilities according to their value, use and importance to achieve educational goals. They are classified into instructional, creational and residential facilities. Instructional facilities are those facilities that have direct bearing on the process of teaching and learning such as classrooms and the equipment in them. Recreational facilities refer to all the facilities used for games and sports. They include facilities and equipments in such games as football, handball, basketball, volleyball, hockey, table and lawn tennis. Others are indoor games such as Ludo, Draught, Whot, Chess, Scrabble and Snooker to mention but a few. Residential facilities are hostels, dinning halls, staff residential quarters, staffrooms, offices, assembly halls and the administrative buildings.

Adesina (1980) in Maduagwu & Nwogu (2006) reported that the quality of education which our children receive have great relevance to the availability or lack of these facilities. It is not therefore surprising to state that Abia State which is one of the "educationally advantaged" states in Nigeria, cannot boast of better furnished schools. There is also great disparity in the provision of physical facilities in the urban and rural public schools. In many schools physical facilities are unutilized, under-utilized, or over-utilized while some are used to full capacity. They are over utilized because of increased number of users. The rate of utilization could be increased either by extending the utilization time for extra lessons or by allowing access to the school and sports equipment by the community (Ndu, et al, 1997). This is because physical facilities are powerful indicators of community values and aspirations. They serve the academic need of the students and address the social, educational, recreational and personal needs of the members of the community. Ebong (2006) stated that the utilization of educational resources depends on their need and rate of usage. This study is based on the system resource model which states that effectiveness is seen in the organizations ability to secure an advantageous bargaining position in its environment and capitalize on that position to acquire, judiciously distribute and monitor the utilization of scarce and valued resources (Hoy & Miskel, 1987 p.322-323). The availability and utilization of physical facilities by teachers will increase teacher productivity and efficiency which will in turn improve pupils' academic achievement. Since the teachers cry of lack of physical facilities to teach the pupils, the researchers therefore sought to determine the availability and utilization of physical facilities in public primary schools in Abia State.

# **Statement of Problem**

The high rate of failure in both internal and external examinations in public primary schools is alarming. Education stakeholders blamed the teachers. Teachers on their own part blamed the government for neglecting the public primary schools. They claimed that apart from the knowledge they acquired in the Millennium Development Teacher Retraining Programmes, there are no physical facilities that can enhance teaching and learning. The researchers therefore sought to investigate the availability and utilization of physical facilities which enhance teaching and learning in public primary schools in Abia State. This is because these physical facilities aid teaching and learning.

# **Purpose of the Study**

The main purpose of this study was to investigate the availability and utilization of physical facilities in public primary schools in Abia State. Specifically, the study sought:

To determine what facilities are available in primary schools in Abia State To examine the extent the facilities are utilized in Abia state primary schools.

#### **Research Ouestions**

The research questions sought to find out the availability and utilization of physical facilities in public primary schools in Abia State.

- 1. What physical facilities are available for teaching in public primary schools in Abia State?
- 2. To what extent are physical facilities utilized for teaching in public primary schools in Abia state?

# **Hypothesis**

The following hypothesis guided the study.

- 1. There is no significant difference between the mean ratings of the responses of urban and rural head teachers on the availability of physical facilities in public primary schools in Abia state.
- 2. There is no significant difference between the mean ratings of the urban and rural head teachers on the extent of utilization of physical facilities in public primary schools in Abia state

### Method

This study was a descriptive survey aimed at determining the availability and utilization of physical facilities in public primary schools in Abia state. The population of the study comprised of all the 1230 head teachers in public primary schools in Abia state (Abia State Universal Basic Education Board, 2010). Out of the population of 1230 serving head teachers, a sample of 123 head teachers representing 10% of the population was drawn through the stratified random sampling technique. An instrument titled Availability and utilization of physical facilities (AUPF) was validated by experts in the department of educational administration. Their comments and suggestions were

used to improve the quality of the instrument. Physical observation of primary schools' Physical facilities and oral interview were used. To ascertain the consistency of the results, the researcher administered questionnaires to 10 head teachers who were not included in the sample of the study. Test retest method was used to determine the reliability and a correlation index was achieved at 0.85 through Pearson's Product Moment correlation co-efficient. The modified 4- point Likert rating scale viz:

Strongly Agree (SA)	-	-	4
Agree (A)	-	-	3
Disagree (D)	-	-	2
Strongly Disagree (SD)	-	-	1 and,
Very Great Extent (VGE)	-	_	4
Great Extent (GE)-	-	-	3
Very Low Extent (VLE)	-	-	2
Low Extent (LE)	-	-	1
i.e. $4+3+2+1=10/4$	= 2.50		

Mean was used to answer the research questions while t-test statistics was used in testing the hypothesis at 0.05 level of significance. Items whose mean ranged from 2.50 and above were accepted while items whose mean fell below 2.50 were rejected. The hypothesis will be accepted if the calculated value is less than the critical value of  $1.\pm96$  and will be rejected if the calculated value is more than the critical value of  $\pm1.96$ .

#### Results

**Research Question 1**: What physical facilities are available for teaching in public primary school in Abia State?

**Table 1**: Mean of available physical facilities in public primary school in Abia State.

	1 2		1 1	•	
			URBAN=86		RURAL=37
S/N	ITEMS	X	REMARK	$\mathbf{X}$	REMARK
1	Classrooms	2.83	Available	2.52	Available
2	Libraries	2.13	Not Available	1.71	Not Available
3	Laboratories	1.12	Not Available	1.83	Not Available
4	Sports Field	2.65	Available	1.87	Not available
5	Toilet Facilities	2.53	Available	2.41	Not Available
6	Head Teachers' Office	2.77	Not Available	2.58	Available
7	Assistant Head Teachers	, 2.67	Available	2.51	Available
	Office				
8	Assembly Halls	2.72	Available	1.80	Not Available
9	Staff Rooms	2.87	Available	2.77	Available
10	Instructional Materials	2.21	Not Available	1.87	Not Available
11	Fans	1.17	Not Available	1.80	Not Available
			Not Available	1.85	Not Available
12	Transport Facilities	1.63			
1 13	Furniture	2.64	Available	2.59	Available
	Aggregate Mean	2.13		2.01	

Source: Field Work 2011

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Data in the above table shows that the available physical facilities are classrooms (2.83,2.52), sports fields (2.65), toilet facilities (2.53 in the urban)head teachers' offices (2.77,2.58) assistant head teachers' offices (2.67,2.51), assembly halls (2.72 in the urban) staff rooms (2.87,2.77) and furniture (2.64,2.59) etc. Their mean scores were above the criterion mean of 2.50. While libraries (2.13, 1.71), laboratories (2.12, 1.83), computers / typewriters (2.14,1.08) instructional materials (2.21,1.87) and transportation facilities (1.63,1.85) etc. were not available. Their mean scores were below the criterion mean of 2.50.

**Research Question 2:** To what extent are physical facilities utilized for teaching in public primary schools in Abia state?

**Table 2:** Mean of extent of Utilization of physical facilities in public primary schools in Abia State.

			$\mathbf{URBAN} = 86$		RURAL = 37
S/N	ITEMS	X	REMARK	X	ARK
1	Classrooms	2.83	Accepted	2.58	Accepted
2	Libraries	2.05	Not Accepted	1.63	Not Accepted
3	Laboratories	1.19	Not Accepted	1.83	Not Accepted
4	Sports Fields	3.07	Accepted	2.65	Not accepted
5	Toilet Facilities	2.53	Accepted	2.41	Not Accepted
6	Head Teachers' Offices	2.67	Accepted	2.58	Accepted
7	Assistant Head Teachers' Offices	2.63	Accepted	2.51	Accepted
8	Assembly Halls	2.72	Accepted	2.59	Accepted
9	Staff Rooms	2.71	Accepted	2.54	Accepted
10	Instructional Materials	1.95	Not Accepted	1.80	Not Accepted
11	Computes/Typewriters	2.01	Not Accepted	1.05	Not Accepted
12	Fans	2.14	Not Accepted	1.80	Not Accepted
13	Transport Facilities	2.34	Not Accepted	1.85	Not Accepted
14	Furniture	2.64	Accepted	2.59	Accepted
	Aggregate Mean	2.26		1.98	

Source: Field Work 2011

Data in the table shows that the Head Teachers in the primary schools accepted that classrooms (2.83,5.53), sports field (3.07,2.61), toilet facilities (2.53in the urban), head teachers' offices (2.67, 2.58), assistant head teachers' offices (2.63,2.51), assembly halls (2.72,2.59), staff rooms (2.71,2.54) furniture (2.64,2.59) were to a very great extent utilized. Their mean scores were above the criterion mean of 2.50. While libraries (2.05, 1.63), laboratories (1.91, 1.83), computers / type writers

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(2.01, 1.05), instructional materials (1.95, 1.80) fans (2.14, 1.80), transport facilities (2.34, 1.85) etc. were to a very low extent utilized.

# **Hypothesis One**

There is no significant difference between the mean ratings of the responses of urban and rural head teachers on the availability of physical facilities in public primary schools in Abia state.

**Table 3:** t-test of difference between the mean ratings of the responses of urban and rural head teachers on the availability of physical facilities in public primary schools in Abia state.

Location	N	X	SD	DF	T-Cal.	T-Crit.	Decision
Urban	86	2.13	1.45	121	0.44	±1.96	Accepted
Rural	37	2.01	1.41				-

Data in the table indicates that the calculated value (0.44) is less than the critical value of  $\pm 1.96$ . The null hypotheses is accepted. Therefore, there is no significant difference between the mean ratings of the responses of urban and rural head teachers on the availability of physical facilities in public primary schools in Abia state is hereby accepted.

# **Hypothesis Two**

There is no significant difference between the mean ratings of the urban and rural head teachers on the extent of utilization of physical facilities in public primary schools in Abia state.

**Table 4:** t-test of difference between the mean ratings of the responses of urban and rural head teachers on the extent of utilization of physical facilities in public primary schools in Abia State.

Location	N	X	SD	DF	T-Cal.	T-Crit.	Decision
Urban	86	2.26	1.50	121	1	±1.96	Accepted
Rural	37	1 98	1 41				_

Data in the above table shows that the calculated value (1) is less than the critical value ( $\pm 1.96$ ). The null hypothesis is accepted. This means that there is no significant difference between the mean ratings of the urban and rural head teachers on the extent of utilization of physical facilities in public primary schools in Abia state is hereby upheld.

#### Discussions

The study reveals that head teachers agreed that classrooms, sports fields, head teachers' offices, assistant head teachers' offices, assembly halls, staff rooms and furniture were available in the schools. They disagreed that Libraries, Laboratories,

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Computers / Typewriters, Instructional materials, Fans, Transport Facilities etc. were available. No wonder the pupils are not performing well in examinations. These facilities that are lacking in the schools enhance teaching and learning. They also help pupils with different individual learning abilities to cope in the classrooms. Therefore, their lack will hinder teacher productivity and students' academic achievement. They help the teachers to achieve the educational goals faster than when they are not provided. This is line with Ndu et al (1997) observation that there is a positive relationship between the academic performance of pupils in schools and the availability and nature of physical facilities. There was no significant difference in the mean ratings of urban and rural head teachers on the availability of physical facilities in public primary schools in Abia State.

On the extent of utilization of physical facilities, most of the facilities were to a very great extent utilized. They include such facilities as classrooms, sports fields, assembly hall, staff rooms and furniture among others. From all indications, these facilities were over-utilized due to increase in enrolment of pupils as a result of Universal Basic Education Programme. The facilities that were to a very low extent utilized were libraries, laboratories, computers /typewriters, instructional materials, fans among others. The reason is that they are not available. This agrees with Ebong (2006) that the utilization of educational resources depends on their need rate of usage. This is true of this time too. Oral interviews showed that books are available but due to lack of libraries and librarians, the head teachers preferred to keep them in their offices. The head teachers also claimed that if they are given to the pupils, they will tear them. "What is the essence of giving them those books? No wonder there is poor reading culture among the pupils. That may also be the reason why affluent parents send their children to private schools leaving the children of the poor to waste at the state schools. There was no significant difference between the mean responses of urban and rural head teachers on the availability and utilization of physical facilities in public primary schools in Abia State.

# **Implication of the Study**

- 1. The results of this study revealed that many physical facilities are not available in Abia State Public Primary Schools.
- 2. The available ones are to a very extent utilized because they are not enough for the pupils while some are to a very low extent utilized because they are not available.
- 3. In some areas, there are wasteful imbalances where there are surplus facilities for fewer numbers of pupils.
- 4. For the millennium Development Goals to be achieved in education, all the physical facilities that enhance teaching and learning should be provided and well utilized.

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#### Conclusion

Many Physical facilities are not available in schools. The available ones are overutilized and at times under-utilized. Pupil will perform better when all these facilities are provided in adequate quantities and utilized.

#### Recommendation

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

- 1. Government should make available adequate physical facilities to primary schools to enhance teaching and learning.
- 2. School Heads should allow the pupils make use the available facilities instead of keeping them in their offices.
- 3. Non- Governmental Organizations and other stakeholders should provide physical facilities to schools.

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