

ISSN 0300-3882

# JOURNAL OF EDUCATIONAL RESEARCH

VOL. 12, NUMBER 1

JANUARY - JUNE, 2008

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PUBLISHED BY  
THE DEPARTMENT OF TEACHER EDUCATION  
UNIVERSITY OF IBADAN

**AFRICAN JOURNAL OF EDUCATIONAL  
RESEARCH**

**VOL. 12, NO. 1, 2008**

**JANUARY - JUNE, 2008**

**ISSN: 0303-3872**

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# An Investigation of the Child-friendly Environmental Status of Primary Schools in terms of nature of classrooms

Chukwuma C. Agomoh

and

Jeremiah G. Adewale

## Abstract

*This study investigated the extent to which the environment of our primary school classrooms is child-friendly in terms of nature of classrooms. The sample comprised the head teachers of 165 primary schools in the urban and rural areas of Abia State. Data collection involved the use of a validated Child-friendly Environmental Status Inventory (CFESI). The data were analyzed using frequency counts and percentages. The results indicate that the child-friendly environmental status of classrooms in the primary schools varied widely and depended very much on school type. However, there was no school in which the child-friendly environmental status of the classrooms was 0% or 100%. The implications of these findings for teaching-learning condition in primary schools are discussed.*

## Introduction

Schooling involves the teacher, infrastructure, teaching-learning materials, instruction, support from parents and the home, support from the community, interpersonal relations and other influencing factors (such as political, social, religious, parental), and achievement in the cognitive, affective and psycho-motor domains (Goodlad, Mantle-Bromley and Goodlad, 2004). Schooling also involves norms of behaviour and thinking that have been made into laws by governments, examination bodies, and schools. According to Rowe (2000) and Rowe (2001), schooling accounts for a significant proportion of public and private expenditure, and generates a substantial quantity of paid employment for teachers and administrators. Mensch and Lloyd (1997) estimated the effects of schooling on children to be enormous and include both cognitive competencies and the formation of values, norms and aspirations that will affect their lives in the future.

The quality of this outcome depends on the quality of inputs made. Therefore, the quality of learning, an output variable, depends upon the input and process variables especially the teaching-learning

environment (UNICEF, 2002). Hence, Falayajo, Makoju, Okebukola, Onugha and Olubodun (1997) reported that the prevailing quality of the school environment constituted a major impediment to effective teaching and learning activities in schools. This, therefore, implies that the outcome of schooling in Nigeria may not be as desired by the stakeholders.

From the international perspective, Nigeria has not met, and stands the risk of not meeting, the international targets set for the Universal Basic Education (UBE) Programme, and the 2000 Education for All (EFA) Declaration which set targets on basic education by the year 2015. As a result, the United Nations Children's Fund (UNICEF) designed the Integrated Growth and Development (IGD) Programme for the purposes of establishing more child-friendly (especially girl-friendly) schools with improved facilities for teaching and learning, among others (UNICEF, 2002). To achieve the establishment and promotion of child-friendly schools in the 10 states in UNICEF A-Field Zone (including Abia State), as a sub-component of the Learning/Girls' Education component of the IGD Programme, UNICEF budgeted the sum of \$8.45 million for 2002 - 2007 (UNICEF,

2002). UNICEF has gone ahead to implement the activities designed to achieve the objectives of the IGD programme, through the relevant agencies at the state and federal levels.

The 2000 World Education Forum had pledged to "create safe, healthy, inclusive and equitably resourced educational environments conducive to excellence in learning with clearly defined levels of achievement for all" (Declaration 8, viii) to facilitate the achievement of Education for All goals. This pledge establishes a vital relationship between school environment and learning. In addition, declaration 30, under Education for All goal 1, asserted that young children "must be nurtured in safe and caring environments that allow them to become healthy, alert, and secure and be able to learn" (UNESCO, 2005). This assertion further establishes a vital relationship between school environment and learning, thus recognizing the importance of a child-friendly school environment in facilitating teaching and learning activities in schools (UNESCO, 2005) and this also stresses the need for a study of the school and classroom environment.

In an effort to achieve EFA by 2015, the Federal Government of Nigeria declared 'free and compulsory' basic education in Nigeria since 1999. This programme has run the full course of primary education and has taken over the first year of junior secondary education. The implementation of this 'free and compulsory' basic education in Nigeria is capital intensive. This is mainly in the area of providing additional classrooms, maintaining available classrooms, providing teaching-learning materials, among others. The problem has, however, remained that government, realizing its inability to adequately fund this programme alone, has solicited the participation of local communities, individuals and other organizations. It is noteworthy that the establishment of some relevant sectoral bodies such as the defunct Petroleum Trust (Special) Fund (PTF), the Nigeria Education Bank (NEB), the Education Tax Fund (ETF) and the participation of the local communities, individuals and organizations has not solved the problem of primary education infrastructure in Nigeria. This is

in spite of the fact that the government realized that education shall continue to be highly rated in the national development plans because education is the most important instrument of change; any fundamental change in the intellectual and social outlook of any society has to be preceded by an educational revolution. (FRN, 2004).

The World Bank, UNICEF, Department for International Development (DFID), European Union-funded Micro-Projects Programme in Six States of the Niger Delta (MPP6), Universal Basic Education Commission (UBEC), Niger Delta Development Commission (NDDC), Petroleum Trust Fund (PTF), Education Tax Fund (ETF), State Universal Basic Education Boards, communities and individuals have intervened in various ways to make classrooms conducive and child-friendly in the provision of new and modern classrooms through construction and renovation, and provision of furniture and teaching-learning materials. The intervention of the MPP6 in education includes the "rehabilitation and improvement of the school system: construction and rehabilitation of classroom blocks and offices, purchase of school furniture and support to libraries" (MPP6, 2005). Other areas of intervention by MPP6 are health, water and sanitation, access roads, civic resource centres, environment and anti-erosion, and the provision of income generating activities.

In spite of all these, however, evidence abounds to show that the facilities in most public primary schools are not child-friendly. Specifically, this study investigated the nature of classrooms, ventilation, lighting, electricity supply, and aesthetics. The study is necessary because the teachers and pupils need comfortable and conducive classrooms in order to function effectively in the teaching-learning situation. This is more important in this era of the universal basic education programme with emphasis on the achievement of access, equity, quality and relevance.

## Methodology

### (a) Design

This study is an ex-post facto (non-experimental) research. It is so because the

events had already occurred and the researcher did not have control over the independent variables, did not manipulate the variables, and only made inferences from the observations made.

#### (b) Sample

The sample comprised the Headteachers of 165 primary schools from all the 17 Local Government Areas in Abia State who were selected through stratified random sampling technique. The sample comprised all the thirty (30) World Bank-assisted Focus Schools, all the six (6) UNICEF-assisted Child-Friendly Schools, 20 percent (34) of the World Bank-assisted Self-Help Schools, 10 percent (63) of the other public Schools, and 10 percent (32) of the recognized private schools in the State. This

sample is representative of primary schools in the State

#### (c) Instrumentation

The instrument used to collect data for the study is the Child-Friendly Environmental Status Inventory (CFESI). The estimate of construct validity and internal consistency reliability of the CFESI is 0.83 using the Cronbach alpha.

#### (d) Data Collection and Analysis

The investigators and fifteen others directly participated in the data collection exercise. The data were analyzed using frequency counts and percentages. The percentages were derived from the proportion of schools that have a facility relative to the total number of schools in the sample.

## Results

**Table 1: Classrooms with quality walls**

Quality	Percentage of classrooms	School Type					Total	%
		World Bank Focus	World Bank Self-Help	UNICEF Child-friendly	Others	Recognized Private		
Plastered walls	50 - 100	24 (14.5%)	27 (16.3%)	6 (3.6%)	46 (27.9%)	28 (17.0%)	<b>131</b>	<b>79.6</b>
	0-49	6 (3.6%)	7 (4.2%)	0 (0%)	17 (10.3%)	4 (2.4%)	<b>34</b>	<b>20.6</b>
Without cracks	50 - 100	15 (9.1%)	20 (12.1%)	4 (2.4%)	29 (17.6%)	25 (15.1%)	<b>93</b>	<b>56.3</b>
	0-49	15 (9.1%)	14 (8.5%)	2 (1.2%)	34 (20.6%)	7 (4.2%)	<b>72</b>	<b>43.7</b>
Painted walls	50 - 100	22 (13.3%)	17 (10.3%)	5 (3.0%)	31 (18.9%)	21 (12.7%)	<b>96</b>	<b>58.2</b>
	0-49	8 (4.8%)	17 (10.3%)	1 (0.6%)	32 (19.4%)	11 (6.7%)	<b>69</b>	<b>41.8</b>
Without termite tracks	50 - 100	6 (3.6%)	15 (9.0%)	1 (0.6%)	16 (9.7%)	6 (3.6%)	<b>44</b>	<b>27.7</b>
	0-49	24 (14.5%)	19 (11.5%)	5 (3.0%)	47 (28.5%)	26 (15.8%)	<b>121</b>	<b>73.3</b>

Table 1 shows that 50-100% of classrooms in 131 (79.6%) schools and less than 50% of the classrooms in 34 (20.6%) schools respectively had plastered walls; that 50-100% of classrooms in 93 (56.3%) schools and less than 50% of the classrooms in 72 (43.7%) schools respectively had walls without cracks; that

50-100 % of classrooms in 96 (58.2%) schools and less than 50% of the classrooms in 69 (41.8%) schools respectively had painted walls; and that 50-100% of classrooms in 44 (27.7%) schools and less than 50% of the classrooms in 121 (73.3%) schools respectively had walls without termite tracks.

**Table 2: Classrooms with quality floors**

Quality	Percentage of classrooms	School Type					Total	%
		World Bank Focus	World Bank Self-Help	UNICEF Child-friendly	Others	Recognized Private		
Cemented floors	50 - 100	24 (14.5%)	22 (13.3%)	6 (3.6%)	46 (27.9%)	30 (18.2%)	128	77.6
	0-49	6 (3.6%)	12 (7.2%)	0 (0%)	17 (10.4%)	2 (1.2%)	37	22.4
Without breaks	50 - 100	18 (10.9%)	19 (11.5%)	4 (2.4%)	23 (13.9%)	7 (4.2%)	71	43.0
	0-49	12 (7.3%)	15 (9.1%)	2 (1.2%)	40 (24.3%)	25 (15.2%)	94	57.0

Table 2 reveals that 50 - 100% of classrooms in 128 (77.6%) schools and less than 50% of classrooms in 37 (22.4%) schools respectively had cemented floors;

and that 50 - 100% of the classrooms in 71 (43.0%) schools and less than 50% of the classrooms in 94 (57.0%) schools respectively had walls that were not broken.

**Table 3: Classrooms with quality roofs**

Quality	Percentage of classrooms	School Type					Total	%
		World Bank Focus	World Bank Self-Help	UNICEF Child-friendly	Others	Recognized Private		
Without leakage	50 - 100	17 (10.3%)	18 (10.9%)	5 (3.0%)	27 (16.4%)	27 (16.4%)	94	57.0
	0-49	13 (7.8%)	16 (9.7%)	1 (0.6%)	36 (21.8%)	5 (3.0%)	71	43.0
With ceiling	50 - 100	16 (9.7%)	14 (8.5%)	3 (1.8%)	26 (15.8%)	21 (12.7%)	80	48.5
	0-49	14 (8.5%)	20 (12.1%)	3 (1.8%)	37 (22.4%)	11 (6.7%)	85	51.5

Table 3 shows that 50-100% of classrooms in 94 (57.0%) schools and less than 50% of classrooms in 71 (43.0%) schools respectively had roofs without

leakage; and that 50-100% of the classrooms in 80 (48.5%) classrooms and less than 50% of classrooms in 85 (51.5%) schools respectively had roofs with ceiling.

**Table 4: Classrooms with adequate spaces**

Quality	Percentage of classrooms	School Type					Total	%
		World Bank Focus	World Bank Self-Help	UNICEF Child-friendly	Others	Recognized Private		
Enough spaces in-between seats for free movement	50 - 100	24 (17.6%)	24 (17.6%)	4 (2.4%)	50 (30.3%)	32 (19.4%)	134	81.2
	0-49	6 (3.6%)	10 (6.0%)	2 (1.2%)	13 (7.9%)	0 (0%)	31	18.8
Space for display of	50 - 100	20 (12.2%)	23 (13.9%)	3 (1.8%)	42 (25.5%)	29 (17.5%)	117	70.9



teaching-learning materials	0-49	10 (6.0%)	11 (6.7%)	3 (1.8%)	21 (12.7%)	3 (1.8%)	48	29.1
Space for storage	50 - 100	10 (6.1%)	8 (4.8%)	1 (0.6%)	17 (10.3%)	27 (16.3%)	63	38.2
	0-49	20 (12.1%)	26 (15.7%)	5 (3.0%)	46 (27.9%)	5 (3.0%)	102	61.8
Space for subject/nature corners	50 - 100	22 (13.3%)	17 (10.3%)	5 (3.0%)	31 (18.8%)	21 (12.7%)	96	58.2
	0-49	8 (4.8%)	17 (10.3%)	1 (0.61%)	32 (19.4%)	11 (6.7%)	69	41.8

Table 4 reveals that 50 - 100% of classrooms in 134 (81.2%) schools and less than 50% of classrooms in 31 (18.8%) schools have enough spaces in-between seats for free movement; that 50-100% of the classrooms in 117 (70.9%) schools and less than 50% of the classrooms in 48 (29.1%) schools have space for display of

teaching-learning materials, that 50 - 100% of classrooms in 63 (38.2%) schools and less than 50% of classrooms in 102 (61.8%) schools have space for storage; and that 50 - 100% of classrooms in 96 (58.2%) schools and less than 50% of classrooms in 69 (41.8%) schools have space for subject/nature corners.

**Table 5: Percentage of classrooms with necessary conditions**

Condition	Percentage of classrooms	School Type					Total	%
		World Bank Focus	World Bank Self-Help	UNICEF Child friendly	Others	Recognized Private		
Adequate lighting	50 - 100	17 (10.3%)	22 (13.3%)	6 (3.6%)	40 (24.2%)	31 (18.8%)	116	70.4
	0-49	13 (7.9%)	12 (7.3%)	0 (0%)	23 (13.9%)	1 (0.6%)	49	29.8
Electricity supply	50 - 100	0 (0%)	1 (0.6%)	0 (0%)	3 (1.8%)	23 (13.9%)	27	16.3
	0-49	30 (18.2%)	33 (20.0%)	6 (3.6%)	60 (36.4%)	9 (5.5%)	138	83.7
Chalkboard	50 - 100	22 (13.3%)	27 (16.3%)	6 (3.6%)	49 (29.8%)	32 (19.4%)	136	82.4
	0-49	8 (4.8%)	7 (4.2%)	0 (0%)	14 (8.5%)	0 (0%)	29	17.6
Good ventilation	50 - 100	25 (15.2%)	28 (17.0%)	6 (3.6%)	50 (30.3%)	31 (18.8%)	140	84.9
	0-49	5 (3.0%)	6 (3.6%)	0 (0%)	13 (7.9%)	1 (0.6%)	25	15.1

Table 5 indicates that 50 - 100% of classrooms in 116 (70.4%) schools and less than 50% of classrooms in 49 (29.8%) schools have adequate lighting; that 50 - 100% of classrooms in 27 (16.3%) schools and less than 50% of classrooms in 138 (83.7%) schools have electricity supply; that 50 - 100% of classrooms in 136 (82.4%) schools and less than 50% of classrooms in 29 (17.6%) schools have chalkboard; and that 50 - 100% of classrooms in 140 (84.9%) schools and less than 50% of

classrooms in 25 (15.1%) schools have good ventilation.

### Discussion and Conclusion

The findings approximate to UNICEF prescriptions that classrooms in a child-friendly school should comfortably accommodate class sizes within government regulations, and that "classrooms and classes should be well-organized and seating arrangements comfortable and

uncongested" in a child-friendly school. (FME and UNICEF, n.d.).

Having spaces in-between seats for free movement, or otherwise, is an indication of how crowded a classroom is. In an overcrowded classroom, more pupils are jammed into spaces intended for a less number of pupils. Research indicates that overcrowding can have adverse effect on learning. It negatively affects both classroom activities and teaching techniques that are adopted by the teachers. Overcrowding also makes it difficult for pupils to concentrate on their lessons. Thus, it affects their academic achievement (USDE, 1999). According to Lackney (2002), reduction of spatial density and crowding reduces aggressive behaviour in pupils. This, therefore, tends to suggest that absence of overcrowding facilitates teaching and learning activities in schools. The population explosion in schools occasioned by the Universal Basic Education (UBE) programme resulted in the massive construction, rehabilitation and renovation of classroom in all states of Nigeria in order to ensure adequate classroom spaces for the pupils. To facilitate this, the Federal Government of Nigeria releases 2% of its Consolidated Revenue Fund (CRF) as intervention in basic education delivery in Nigeria.

In addition, classrooms with leaking roofs, damaged doors and windows are not healthy because their ceiling boards are wet and they are flooded after a heavy rainfall. This dampness encourages infestation of insects and rodents, supports the growth of microbes, and leads to the release of chemicals from building materials and furnishings, and possibly adverse health outcomes such as cough and asthma. This problem becomes greater when poorly ventilated classrooms trap excess moisture. Under the UBE programme, the instituted quality assurance measures ensure that all the new classroom blocks do not have leaking roofs.

Ventilation is important because it affects indoor air quality (IAQ), but classrooms in only 84.9% of the schools were found to be child-friendly with respect to good ventilation. Good ventilation facilitates the replacement of expired air {mainly carbon (IV) oxide} with fresh air rich in oxygen. Good ventilation serves as a

good means of diluting air contaminants in buildings. Indoor air quality (IAQ) refers to the air quality within and around buildings and structures, especially as it relates to the health and comfort of occupants. Analysis of IAQ facilitates an understanding of the air contaminants and the strategies for removing them from the air.

Zota, Adamkiewicz, Levy and Spengler (2005) found that ventilation facilitates air exchange rates (AERs), and concluded that IAQ is mainly a function of outdoor concentrations, indoor sources, ventilation, and residential behaviour. USEPA (2003) concluded that poor IAQ, arising from poor ventilation, results in absenteeism from school and acute health symptoms that decrease performance while at school. Poor IAQ directly reduces a person's ability to perform specific mental tasks that require concentration, calculation or memory.

Common pollutants of air in the classrooms are radon, molds and other allergens, carbon monoxide, volatile organic compounds (like organic solvents, paints, varnishes, and wax, asbestos fibers, carbon dioxide, ozone, etc.

Illumination is a critical physical characteristic of the classroom but only 70.4% of the schools were found to be child-friendly in this regard. It is important because it provides an improved learning environment and an appropriate visual environment for learning tasks through better vision, visual impact and comfort. The visual environment affects a learner's ability to perceive visual stimuli and affects his/her mental attitude, and thus, performance. Dunn, Krinsky, Murray and Quinn (1985) saw lighting in a school as an active element of the total educational environment and reported that "illumination seems to be so important that even seasonal mood changes as strong as depression have been treated successfully merely by increasing the bright light in a person's environment".

Good lighting contributes significantly to the aesthetics and psychological character of the learning space, and well-lit classrooms facilitate the academic performance of pupils. (The University of Georgia, n.d.) found that the ability of pupils to concentrate on instructions was strongly influenced by

factors such as lighting. Other studies cited by The University of Georgia (n.d.) indicated that poor lighting leads to a misinterpretation of the written word, whether in a handout or on the chalkboard, an abuse of the human eye with some unfortunate physiological consequences, and that the significant factors affecting loss of contrast in a school situation are visual tasks, type of lighting, and lighting levels. Because of the importance of lighting in schools, the School Design and Planning Laboratory (SDPL) of the University of Georgia has recommended that at least 20% of the wall space be devoted to windows. According to Tanner (1999), these windows, serving as spaces introduced on walls to bring in natural light into the learning environment, should be without painted obstructions and other devices that restrict views, and should invite or permit the outdoors inside.

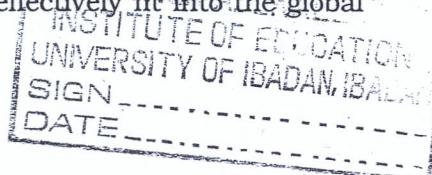
Electricity, an alterable facility, is related to academic achievement. It is found that only 16.4% of the public and private schools had access to electricity. Access to electricity impacts positively on the achievement of pupils (Velez, Schiefelbein and Valenzuela, 1993; Bacolod and Tobias, 2005). This implies that pupils in the rest 83.6% of the schools will be at a disadvantage because electricity is important in the integration and teaching of Information and Communication Technology (ICT) in schools nationwide. ICT plays a prominent role "in advancing knowledge and skills necessary for effective functioning in the modern world" (FRN, 2004). The absence of electricity will hamper the use of radio and television educational broadcasting as a feature of the educational support service system in Nigeria (FRN, 2004). Since 72.7% of the schools in the sample were constituted by rural primary schools, it stands to reason that about 10.9% of the schools without electricity supply were located in the urban areas. This revelation has tended to erroneously equate the urban with the rural areas in terms of electricity supply and is detrimental to the effective implementation of the UBE programme because Computer Studies is now a core compulsory subject in the basic education sub-sector in Nigeria. This subject is very important if Nigerian children are to effectively fit into the global

village to which the world has been reduced. The computer is the basis for the internet which has facilitated communication within and across the nations of the world.

Classrooms in 82.4% of the schools had chalkboards. This corroborates Falayajo et al (1997) where it was noted that chalkboard was adequately available in schools. FME and UNICEF (n.d.) had specified that a child-friendly school should have "usable chalkboards and sufficient chalk". A chalkboard is simply a reusable writing surface for making texts or drawings with sticks of chalk made of calcium sulphate. They constitute one of the most important instructional materials in schools at all levels. The modern versions are often green or brown and are thus sometimes called a greenboards or brownboards instead. Chalkboards have almost become obsolete with the advent of white boards. The absence of chalkboards in schools raises doubts as to what teachers "teach" in such schools. Chalkboards constitute the minimum sets of materials that a school should have, even in an improvised form, to facilitate teaching-learning activities.

The UNICEF introduced the concept of subject/nature corners in its Indigenous Communicative Teaching Approach (ICTA) and believed that their availability in schools will contribute to make teaching and learning more effective. A subject/nature corner in schools is a designated portion of a classroom, free from being tampered with by pupils, in which indigenous teaching aids are stored and easily retrieved when required to facilitate teaching and learning. FME and UNICEF (n.d.) prescribed that needed materials are "locally prepared and procured and made available for teachers who should use them". That classrooms in 45.5% of the schools had subject/nature corners is not child-friendly enough. The implication of this is that classrooms in 55.5% of the schools lacked this facility.

To enhance the aesthetics of school buildings, classrooms are painted inside and outside. Paints are used to protect, preserve and decorate or add functionality to an object or surface by covering it with a pigmented coating. There is no wonder then that the classroom blocks constructed by



all the states under the UBE programme are painted to enhance their aesthetics. This study found that the classrooms in 58.2% of the primary schools in the state had painted walls, leaving classrooms in 41.8% of the schools not painted. This paint had to be of such quality that it can be rated "low-emitting" for volatile organic compounds, be attractive to teachers and pupils, be of high quality and should not be defaced with different types of graffiti because some paints contain compounds that pupils and teachers can be allergic to.

This might have accounted for the use of gloss (oil paint) in painting the doors and windows, and the lower half of the walls of all the classroom blocks funded or supported by the Universal Basic Education Commission and the Niger Delta Development Commission since 2001. However, emulsion paint was used on the upper half of the walls. Faded or peeling paint is an indication of a decaying environmental condition. Onwu (1998) found that the physical conditions (the aesthetics) on ground and the availability of the needed materials influenced the morale and teaching methods of teachers and head teachers, and by implication the academic achievement of pupils.

Results of the study also indicated that classrooms in 26.7% of the schools are also child-friendly in terms of termite tracks on walls. This means that classrooms in 73.3% of the classrooms in the State have termite tracks on their walls. Termites are social insects that live mainly in colonies in the savannah and tropical rainforest regions. These tracks indicate that the wood used in roofing and/or ceiling the classrooms was not treated with chemicals at the time of construction and that the building is under attack by termites. Attack by termites weakens the wood and causes the collapse of roofs and ceiling boards. Termites also bore tiny holes through plasters or drywalls (Potter, 2004).

The real economic importance of termites is in the destruction of books and records in schools, and even homes. Most termites are economically significant as pests that cause serious structural damage to buildings, crops or plantation forests. Under this condition, schools spend huge amounts of money to remedy a situation that could have been handled cheaply and

effectively at the time of construction. The Universal Basic Education Commission and the Niger Delta Development Commission, the Education Trust Fund, etc, ensured that their contractors treated all the wood used to construct their new classroom blocks to forestall termite infestations.

### Recommendations

In view of the above factors that deal with the quality and nature of classrooms in schools, the following recommendations are made:

- (a) There should be a deliberate national policy aimed at making our schools nationwide more child-friendly with the provision of adequate number of quality classrooms.
- (b) The intervention of the federal and state governments that led to the construction of 14,581 new classrooms and 6,006 renovated classrooms nationwide in the last three years should be sustained.
- (c) Government should ensure that classrooms are constructed in ways that ensure adequate cross-ventilation, moisture control, avoidance of termite attacks, and indoor exposures to microbial and chemical substances likely to have adverse health effects on teachers and pupils. This can be achieved by adequate supervision during the building construction.
- (d) Building new structures or providing new facilities is not enough. The proper use and maintenance of these facilities are critical because badly maintained facilities may constitute health risks. As such, maintenance of structures should be considered at the time of their procurement and installation.
- (e) There is need to construct and renovate more classroom blocks, in all schools. This will go a long way in reducing overcrowding in classrooms.
- (f) All the major stakeholders in basic education, including philanthropists, should collaborate adequately to ensure that our schools have classrooms that are child-friendly.
- (g) There should be increased funding for the provision of additional classrooms in our schools.

It is hoped that the implementation of these recommendations would help to

improve the total environmental status of primary schools and make them more child-friendly.

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