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Assessing Learning Environment for Achieving Standard in Primary Education: Implication for Counselling for Human Capacity Development

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Abstract

The paper is a descriptive survey which sought to identify how the provision of adequate learning environment would affect standard in primary education and subsequently empower both staff and students for capacity development through counselling. Fifteen (15) public primary schools out of 96 identified in Oru-East, Oru-West and Orsu Local Government Area of Imo State. Twenty (20) teachers and 24 pupils were drawn from each of the 15 schools giving a total sample of 300 and 360 respectively. Four research questions and a null hypothesis guided the study. The instrument used was questionnaire (ALEFAS). The data collected were analyzed using statistical mean and standard deviation for the research questions and t-test for the hypothesis. The result among others revealed inadequacy of learning

environment for achieving the needed standard in primary school. The implication is that the provision of adequate learning environment is necessary for achieving standard and human capacity development which awareness will be created through counselling, sensitization, training, awareness campaigns at the state and federal levels.

Key words: Learning environment, achieving standard, capacity development, counselling.

Introduction

The need to achieve standard in primary education in Nigeria and in Imo State in particular should not be over-emphasized. Standard of education is a multidimensional concept which should embrace all functions and activities, teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and academic environment (UNESCO, 1998). In 1985, the Federal Government in her deliberate effort to ensure standard for Nigerian Educational System, promulgated decree No. 16 on the minimum standard for primary and secondary schools nationwide. As a result, two broad areas have been identified for measuring minimum standard in our schools:

(a) Infrastructural Facilities

The decree 16 of 1985 clearly stipulated the guidelines on infrastructural/physical facilities including measurement for primary schools. In this regard emphasis is to be placed on ensuring that the classroom or school, which constitutes the learning environment, should be stimulating and child friendly (Anekwe and Ifeakor, 2010).

(b) Curriculum Content

The content of the curriculum must always be based on the national policy on education which gives the list of all subjects and optional subjects. Anekwe and Ifeakor (2010) pointed out that the first stated minimum standard in education is that the environment in which students learn should be conducive and child friendly. According to Maduwesi (1990) the teaching and learning environment are the setting, physical and conceptual in which teaching and learning are carried out as deliberately planned in the curriculum. Osogbo in Anekwe (2006) stated that learning environment consists of all these physical sensory elements such as lighting, colour, sound, space, furniture that characterized the place in which a student is expected to

learn. It is through counselling, sensitization and awareness programmes that the ministries, teachers and students can be informed. Definition of learning environment according to Anekwe (2006) is summarized to include:

- The complete make up of the parts of the home or centre and outdoor used for caring for children. The learning environment includes the space and how it is arranged and furnished, routines, materials and equipment, planned and unplanned activities and the people who are present.
- The place and setting where learning occurs, it is not limited to a physical classroom but includes the characteristics of the setting.
- All the variables involved in the physical, social and psychological context of learning.
- The instructional, interpersonal and physical characteristics of the classroom which may influence students' performance.
- The physical or virtual setting in which learning takes place.
- Environment that instigates the education of the learners that are involved.

The surroundings in which children learn can greatly influence their academic performance and well-being in school. The architectural layout, decoration and facilities of their school all play a vital role in shaping learning environment, yet the importance of this particular aspect at school life can often be over-looked. According to Esu (2005), a good number of primary schools in the country have poorly equipped laboratories with gross inadequate facilities when compared with the students' population. Furthermore, poor learning environment could also be contributory to students poor attitude and truant behaviours in the study of science (Okebukola 2002). Physical learning environment implies the physical location, building or space, furniture, all the infrastructural facilities and equipment for effective teaching and learning. The social environment includes the level of classroom interaction between students and teachers, students and learning materials, teachers and instructional materials. It shows how friendly the teachers, pupils and head teachers are in the classroom.

Efebo (2000) defines ergonomics as all human factors that affect productivity. It relates to human capability and limitation to performance. He pointed out that ergonomics in teaching/learning environment plays two major roles: to enhance the effectiveness and efficiency with which students learn and teachers instruct. To achieve set standard in the primary education, teaching and learning have to be restricted to be in line with the global trend. The old fashion of using teacher centre method of teaching as against student-centred has to be done away with. Teaching and learning in this information and communication era require new teacher role.

Nwaekezi and Nzokurum (2010) opined that the teachers' are more of facilitators, using varieties of skills to create conducive environment to enhance learning.

The human capacity is the ability of individuals, organizations and societies to perform functions; solve problems, set and achieve goals. Capacity development therefore entails the sustainable creation, utilization and retention to perform functions, solve problem set and achieve goals (UND 2004). Esu (2005) defined capacity as the sustainable creation, utilization and retention of that capacity in order to reduce poverty, enhance self reliance and improve people's lives. It also entails acquisition of both individual skills and institutional capacities and social capital as well as the development of opportunities to put these skills and networks to productive use in the transformation of society.

The school learning environment is a very important area of human capacity building, the furniture in the classroom, the methods of teaching, the provision of instructional materials, the interpersonal relationships in the school between the staff and students and among the students themselves, (Anakwe and Ifeakor, 2010). Esu (2005) regarded capacity building development as a process of change in which the exploitation of resources, the direction of investments, the orientation technological development and institutional change are all in harmony and enhance both current and future potentials to meet human needs and aspirations.

Statement of the problem

Research has shown that the history of primary education in Nigeria shows that there has never been any significant effort to put it on sound footing (Ayodele in Nwaekezi 2004). Therefore, for standard to be achieved in primary education, enabling environment that would facilitate teaching and

learning in primary school becomes very important. Capacity building for teachers and students requires that learning environment will be conducive for teaching and learning (Anekwe and Ifeakor 2010).

The problem of this study is posed in question forms: to what extent would provision of adequate learning environment affect achieving standard in primary education and empower teachers and students for capacity development in Nigeria? The researchers are addressing this question with a view of highlighting the implication for counselling for human capacity development.

Purpose of the study

In general term, the purpose of the study is to ascertain whether the provision of adequate learning environment would enhance standard in primary education and ensures capacity development. Specifically, the study sought to:

1. Determine the adequacy of the physical learning environment provided for achieving standard in three Local Government Areas in Imo State primary education.
2. Ascertain the ergonomics considerations in the design of the classroom environment in primary education.
3. Determine the social climate of primary school for achieving standard.
4. Assess the teaching strategies that are adopted for achieving standard in three Local Government Areas of Imo State.

Research questions

1. Are the provided physical learning environments adequate for achieving standard in primary education?
2. To what extent are there ergonomics considerations in the design of the classroom environment for achieving standard in primary education?
3. What is the social climate of the school for achieving standard in primary education?
4. What are the teaching strategies adopted for achieving standard in primary education?

Null hypothesis

There is no significant difference in the mean responses of primary school teachers and pupils on the adequacy of the provided physical learning environment for achieving standard in primary education.

Methodology

Study design

The study was a descriptive survey which sought to assess the mean responses of teacher and pupils of primary schools in three local government areas of Imo state on the provision of adequate learning environment for achieving standard and capacity building in primary education.

Area of study

The study was conducted in three (3) Local Government Areas of Imo State; Oru East, Oru-West and Orsu.

Population of study

The target population comprised of all the primary five (5) pupils and their teachers in the three (3) Local Government Areas. According to data collected from SUBEB Imo State, 2011 the estimated number of primary five (5) pupils and their teachers in the three local government areas of the study were 8,970 and 1,600 respectively.

Sample and sampling techniques

A representative sample comprising 300 primary 5 teachers and 360 primary 5 pupils were drawn using proportionate random sampling technique to reflect all the primary schools in the three (3) Local Government Areas that were used for the study.

Instrument

The instrument used for the study was self structured questionnaire called ALEFAS (Assessing Learning Environment for Achieving Standard). The questionnaire was developed by the researchers, written in four (4) sections based on the research questions. The weightings of the responses were; Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1.

Validation of the instrument

This was done by two lecturers, from the Department of Education Science and Measurement and Evaluation. These lecturers did both the face and content validity of the instrument.

Reliability of the instrument

The instrument was trial tested with the help of research assistants (graduate assistants) in the researchers' department, on a sample of fifty (50) pupils and 20 teachers who were not used for the study. The result was to determine the reliability of the instrument using Cronbach Alpha technique. A reliability index of 0.84 was established. This value was considered high enough and thus indicated that the instrument was reliable for the study.

Method of data analysis

Mean and standard deviation (sd) were used to analyze the data for the study. The mean responses of 2.5 and above as upper limit on the 4 point scale were considered positive while the mean responses below 2.5 (lower limit) were considered negative. T-test statistics was used to test the hypothesis at 0.05 level of significance.

Results

The results were presented with research questions and hypothesis formulated for the study. For clarity A = Agree, D = Disagree.

There is indication from table 1 that there is inadequate provision of physical learning environment in primary schools in Oru-East, Oru-West and Orsu L.G.As of Imo State as both the teachers and pupils have overall low mean of 2.05 with SD of 0.94 and mean of 1.95 and 1.09 respectively.

Table 2 above showed that the teachers have the overall mean of 2.35 with SD of 1.16 while the students have 2.37 and 1.40 respectively which were below the accepted mean. This showed that generally, there were no ergonomic considerations with design of the classroom environment.

The finding in table 3 revealed a general indication of cordial relationship in the primary schools. While the teachers have an overall mean score of 2.64 with SD of 1.38 respectively, the pupils have 2.68 with SD of 1.36 respectively.

The data in table 4 above revealed that the teachers and students have overall mean score of 1.75 with SD of 0.90 and means score of 1.96 with SD of 1.4 respectively. This is an indication that teaching strategies were inadequate for achieving standard in primary school.

Table 5 indicated that t-calculated is 1.282 against t-critical of 1.96 hence we fail to reject the null hypothesis. This implies that there is no significant

difference in the mean responses of primary school teachers and pupils on the adequacy of the provided physical learning environment.

Discussion of the findings

The respondents (both teachers and pupils) indicated that the available physical learning environment was not adequately provided in the primary schools used for the study. Learning environment influences learning, therefore must be considered seriously if standard in education and subsequently the capacity building of both teachers and pupils must be achieved (Quesenberry, Eddowes and Robinson) in (Anekwe 2006). Provision of adequate instructional materials, infrastructural facilities, education facilities and equipment is very crucial in capacity building. Conducive learning environment for capacity building aims at preparing individual for a balance development. Also, it will assist both learners and teachers to attain a level of performance that must meet their needs and those of the country in quality education.

The findings in table 2 revealed that the ergonomical factors were not considered in the design of the classroom environment. This result is in line with the report of Awotua-Efebo (2000) which stressed that not much emphasis is given to the impact of ergonomical factors in the classroom. Behavioural sociologists and psychologist have found that the right use of colours with proper illustration can improve productivity (Birren, 1978, Nisberg and Shapiro 1984). Designers of teaching/learning environment therefore need to pay more attention on ergonomical factors in the classroom learning environment. Since factors as the physical size and shape of a classroom have an effect on the activities that go on within. The size of the room also has an effect on the class (Efebo 2000).

Table 3 revealed that there was conducive social atmosphere for teaching and learning. There was cordial relationship between teachers and pupils, between head teacher and teachers. This finding is in line with the result of the study carried out by Chukwu (2003) which reported that there was a very cordial relationship among teachers and the primary school pupils. Very strong cordial relationship is important for wholesome development (FRN, 2004).

The findings in table 4 indicated that the traditional methods of teaching and learning were in use in primary schools. It is therefore doubtful whether these methods form the gateway to further education in the life of a child

(Nwanekezi and Nzokurum, 2010). For our primary education to be accepted at the global market, teaching and learning require new teacher role. Teachers cannot depend on the traditional teaching tools, such as chalk, textbooks, overhead video projectors and other type of instructional materials to teach pupils attitudes and skills required for achieving standard in education (Anekwe and Ifeakor 2010). To achieve human capacity building, the development and use of Information and Communication Technology (ICT) devices and ideas to promote human learning is the hall-mark of ICT driven education (Akudolu, 2002).

In respect of the hypothesis generated for the study, there was no significant difference in the mean responses of primary school teachers and pupils on the adequacy of the provided physical learning environment. The importance of school environment is obvious Parker in Anekwe & Ifeakor (2009) observed that the building, the classrooms, equipment, the atmosphere of the school, the nature of discipline, sports, leisure facilities and the standard which the schools set in academic performance are important school environmental issue that determine the wealth of the school and the extent to which educational objectives are achieved.

Implications for counselling and human capacity development

The need for effective and functional capacity development of the teachers, pupils and the school system is needful in order to achieve a set standard for education. Counselling which is a helping relationship as well as a learning experience is capable of sensitizing individuals for capacity development on the order hand. There is need to invest in no small measure in the capacity development for our teachers; (primary school teachers in particular) who are foundation builders. An adage says “if foundation is faulty what can the righteous do”. The implication of this assertion is that teachers, particularly those teaching in primary schools are to be trained to have wherewithal in the use of ICT in the teaching process. This would again imply, the need to reconstruct the instructional delivery processes in primary schools to follow emerging trends in capacity globalization of education in order to improve quality education. For this to be effective in achieving standard, priority attention should be given to adequate provision of infrastructural facilities, ergonomical factors considerations for aesthetics and technological development in the classrooms. The social atmosphere in primary schools should be cordial for good interpersonal relationships.

Capacity building of teachers and pupils would imply Computer Based Education in order to expose them to a variety of instructional options through multimedia channel. Achuonye (2004) similarly observed that internet could be used as instructional tool to explore, investigate, interact, reflect, reason, communicate and learn many concepts in the school curriculum. With this the young child in primary school will grow to meet up with the challenges of globalization.

Conclusion

The attainment of a functional and relevant education will be a mirage without adequate provision of physical learning environment, ergonomics factors considerations in the classroom design, conducive atmosphere for inter-personal relationship and integration of new technologies to meet the challenges for globalization in line with computer age. This calls for serious consideration of capacity development of both teachers, pupils, enabling learning environment for proper teaching and learning.

Recommendation

To achieve the desired standard in primary education, the following recommendations were made;

1. The professional association and government should mount strong awareness campaign on the importance of capacity building for both teachers and pupils.
2. All stakeholders must be involved in capacity building of both teachers and pupils in the provision of enabling environment.
3. The classrooms should be separated from one another by high walls instead of screens.
4. The Federal and State Governments should join hands together in equipping primary schools with infrastructural facilities.
5. Parents' Teachers' Association (PTA) must be involved in human capacity building in the provision of enabling environment.
6. The school authority, teachers and pupils should see to adequate care of both physical and ergonomics environment of the school.
7. Conferences and workshops should be organized for the teachers on Computer Based Learning (CBL).

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Table 1: Mean and Standard Deviation on Physical Climate

S/N	Items	Teachers = 300			Students = 360		
		\bar{X}	SD	Decision	\bar{X}	SD	Decision
	The following aspects of physical learning environment are adequately provided in your school.						
1.	Enough class rooms.	2.0	1.16	D	1.50	0.52	D
2.	Some classes are merged for lack of classrooms.	2.8	0.87	A	2.75	1.53	A
3.	Library with modern books.	2.02	0.01	D	2.30	0.09	D
4.	Pipe born water in school.	1.50	0.60	D	1.88	0.02	D
5.	Enough examination halls.	2.30	1.18	D	2.40	1.20	D
6.	Classroom are used for external examinations.	2.5	1.55	A	2.70	1.65	A
7.	Adequate classroom facilities.	2.20	1.25	D	2.45	1.53	D
8.	Good to let facilities.	1.10	0.10	D	1.05	0.60	D
9.	Computer laboratory.	1.11	0.12	D	1.50	0.63	D
10.	Science laboratory.	2.04	1.19	D	2.60	1.35	D
11.	Below 20 computers.	2.95	1.09	A	3.65	1.40	A
12.	Above 20 computers.	1.65	0.08	D	1.30	0.05	D
	Overall Mean and SD	2.05	0.94	D	1.95	1.09	D

Table 2: Mean and Standard Deviation on Ergonomics considerations

S/N	Items	Teachers = 300			Students = 360		
		\bar{X}	SD	Decision	\bar{X}	SD	Decision
	The following aspects of ergonomics factors are considered in the design of your classroom.						
1.	Well floored classrooms.	2.40	1.65	D	2.0	1.15	D
2.	Broken floors.	2.80	1.70	A	3.10	2.06	A
3.	Spacious classrooms	2.25	1.18	D	2.05	1.08	D
4.	Seats provided by the parents.	3.50	2.08	A	3.15	2.02	A
5.	Seats provided by the government.	2.25	1.18	D	2.05	1.89	D
6.	Ceiled classrooms.	2.00	1.08	D	2.05	0.89	D
7.	Well painted classrooms.	1.03	0.4	D	1.06	0.03	D
8.	Adequate ventilation in the classrooms.	2.08	1.04	D	2.43	1.81	D
9.	Classrooms separated by walls.	1.03	0.04	D	1.06	0.03	D
10.	Classrooms separated by screens.	1.03	0.04	D	1.06	0.03	D
11.	Inadequate lighting in the classrooms.	2.66	1.08	A	2.80	1.19	A
12.	Well decorated classrooms.	1.90	0.16	D	2.03	1.90	D
13.	Comfortable seats in the classrooms.	1.50	0.53	D	1.06	0.07	D
	Overall mean and SD	2.35	1.16	D	2.37	1.40	D

Table 3: Mean and SD on Social Climate of the Primary Schools.

S/N	Items	Teachers = 300			Students = 360		
		\bar{X}	SD	Decision	\bar{X}	SD	Decision
	The social climate of your school is as follows.						
1.	All teachers like each other.	2.5	1.18	A	2.58	1.20	A
2.	Pupils love themselves.	2.05	1.02	D	2.51	1.19	A
3.	There is fighting between teachers.	2.0	1.01	D	2.10	1.04	D
4.	There is fighting between pupils.	2.85	1.05	A	2.90	1.09	A
5.	There is disagreement between teachers and head teacher.	1.80	1.04	D	2.20	1.23	D
6.	There is disagreement between pupils and head teachers.	2.14	1.02	D	2.24	1.06	D
7.	Teachers are kind to pupils.	2.51	1.18	A	2.55	1.25	A
8.	Head teacher is kind to pupils.	3.4	1.91	A	2.95	1.45	A
9.	Cordial relationship exist between teacher and pupils.	3.02	1.90	A	3.11	1.83	A
10.	Pupils take personal problems to their teachers.	3.42	1.92	A	3.00	1.88	A
11.	Pupils in higher classes bully the ones in junior classes.	3.45	1.95	A	3.40	1.84	A
	Overall mean and SD	2.64	1.38	A	2.68	1.36	A

Table 4: Mean and SD on Teaching Strategies

S/N	Items	Teachers = 300			Students = 360		
		\bar{X}	SD	Decision	\bar{X}	SD	Decision
	Your school adopts the following strategies in teaching.						
1.	More than one teacher teach a subject.	2.2	1.23	D	1.95	1.07	D
2.	Pupils normally go for excursion.	2.30	1.21	D	2.30	1.21	D
3.	Computers are used in teaching.	1.00	0.01	D	1.25	1.08	D
4.	Pupils suggest ways in which teaching and learning would improve.	2.04	1.04	D	2.02	1.13	D
5.	Pupils produce handcraft in the school.	1.10	0.01	D	1.45	1.04	D
6.	Pupils work in group.	1.50	1.03	D	2.19	1.13	D
7.	Pupils do not ask questions in the class during lessons.	2.55	1.28	A	2.58	1.35	A
8.	Teachers normally use instructional materials to teach.	2.40	1.25	D	2.43	1.21	D
	Overall mean and SD	1.75	0.90	D	1.96	1.14	D

Table 5: T-test on teachers' and Students' responses on the adequacy of available physical learning environment.

Variables	N	\bar{X}	SD	Level of Significance	Df	Calculated t-test	Critical t-value	Decision
Teachers	300	2.05						
Pupils	360	1.94	0.94	0.05	658	1.282	1.96	Not significant