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EDITORIAL

The 2008 International Conference of the Nigeria Association for Educational Media and Technology (NAEMT) has as its theme "SHIFTING PARADIGMS IN THE TEACHING FUNCTION IN AN ICT ERA"

With adequate response from educators, trainers and ICT experts from within and outside Nigeria, this final compilation of submissions comprising carefully articulated papers, forms the third volume (III) of this International Conference Proceedings. The compendium of views expressed therein would no doubt make a good reading as prelude to transforming the education sector in Nigeria and indeed in Africa. However, the Association may not in any way share the views expressed by individual authors of articles here presented.

Biodun Akinpelu, PhD

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TECHNOLOGY-BASED CLASSROOM; AN ASPECT OF ICT BASED INSTRUCTIONAL STRATEGIES IN LAGOS STATE PRIMARY SCHOOLS

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Abstract

This study is a descriptive survey which set out to find out answers to five major questions which are; how conducive is classroom environment for technology-based instruction? Are there adequate provisions for technological gadgets in classroom? Are teachers competent in ICT skills? Is computer been used for instructional process? Are pupils competent to use computer for learning? Lagos State was used as a case study where three hundred and sixty (360) teachers were randomly selected from twenty four schools including public and private. Twenty five items questionnaire was used to obtain data from the sample. The result indicated impoverished ICTs integrated classrooms in all ramifications. Teachers that are to bring technology to instructional process lack the basic skills, ICTs equipment are beyond the reach of the schools, worst still the school environment is not ICTs compliance. Since technology plays a very indispensable role in the world today, it is imperative that government and all stake holders in education pay realistic attention to making Nigerian classrooms technology-oriented.

INTRODUCTION

Background of the study

There are series of development in teaching and learning recently; a huge upsurge to bring technology to the classroom environment is an unequivocal phenomenon in this millennium. The quality of education of a nation has a great impact in determine the quality of the society and her general developmental status among other nations. If Nigeria is to be found relevant especially in realising the Global Millennium Development and The Education for All (EFA) goals by year 2020, there is an urgent need for Nigeria to make conscious and deliberate move towards reality utilization of Information Communication Technologies (ICTs) in her classrooms. The global communities especially the advanced countries of the world have gone beyond campaign for gathering machines in classroom, they have moved to virtual classroom; that's education at any level can now be received through the internet. Unfortunately, most African nations are still dragging their feet even at the level of bringing machines to classroom for instruction.

Since technology plays a very indispensable role in the world today, the level of implementation of technology in classroom needs serious attention. Interaction between teachers and students these days must go beyond teachers being the focus of attention, interactivity is highly essential to effectively communicate the concept of education to bring about qualitative development of man and resources in the society. One of the most serious challenges that face this nation is the school environment out of which classroom play a major role, most classrooms across the nation are a bit better than medieval centres where people gathered to learn knowledge from philosophers of that age under trees. Reactivating the standard, there is a need to go back to the root of our education system; the nursery and primary education. The treatment given to this level of education has to be revisited, the good Lord says, "if the foundation is destroyed what can the righteous do?" Countries like China, India, and Indonesia are really developing seriously because a serious attention is paid to primary education. The trends of technologies in education in Asia and the Pacific are becoming unprecedented (ICTs). Among these trends according to Srinutapong, (2005) are; the ICT infrastructure, "the use of knowledge management systems, the development and use of learning object repositories, a growth in open schools, the use of mobile technology for learning, combining old with new technologies. Teacher professional development is also an issue

identified by Farrell and Wachholz as well as by several international studies (Vrasidas & Glass, 2004)."

Odubunmi, (2006) described the frustration that has faced the implementation of policies in primary education in Nigeria as ill preparation for science and technology programmes at the take off of schooling. Obayan, (2006) illustrated indices of poor teaching with a diagram showing classroom interactions in poor teaching where teaching is dominated by teacher talk, with very little attention paid to pupils' mental and physical activity. What an obsolete instructional situation? Many research reports have revealed that the situation in most classrooms in Nigeria is far below the expected standard of the global world. Ozoh, (2004) reported that "Model Primary School, New Owerri, Nigeria, is a bold testimony that child-friendly project can succeed. Before 2000, it was just another neglected primary school, with buildings in various states of dilapidation." Gbenu (2002) in his own submission stated that "the poor state of facilities and other resources in schools has resulted to a high rate of dropouts at all levels of the education." He stated further that the completion rate of boys in the primary school and that of the girls stood at 56.3 percent and 45.7 percent respectively as at 1996 (UNDP, 1996). The situation in Nigeria classrooms have made it impossible for the generality of her students to compete favourably with their counterparts at international level.

In the world today, trend in pedagogy is ICTs oriented, hence it is paramount to prepare the present generation of Nigerian to have all round development that's compliance to this millennium since Nigerian children will not live in isolation. Technological classroom will bring in astronomical improvement in students performance which in return will improved educational standard. To accomplish technology-based classrooms, renovation, reconstruction, training and retraining of teachers to integrate ICTs in classrooms and full influx of technology materials must be accelerated and made accessible for instructional purposes just as it has been done in other parts of the world. The real impact of information communication technology (ICT) must be felt and seen in educational system.

Statement of Problems

It is evident through research reports and observation that ICTs is yet to be in realistic and effective implementation stage in Nigeria the ripple effect of this on the coming generation may be very severe as the world is becoming a global village and almost every human endeavour is becoming micro-performance. The onus of integrating this transitional life style and impartation of require skills to meet the challenges of the new world rest absolutely on schools. There is therefore a need to ascertain how prepared are Nigerian Schools in carrying-out this laudable responsibility and to highlight the value of technological classrooms. It is always pointed out that if students have not learnt teachers have not taught, the paramount questions at this juncture are; Is the classroom environment in Nigeria schools conducive for learning? Has the quality of Nigerian school curriculum embraced technological utilization for instruction? Is there any awareness by teachers that education has move away from teacher-centred method to learner centred? What role is ICT playing in primary schools? Have pupils in primary schools been experiencing ICT-based instruction? How far away is the state of our classrooms to the education revolutionary changes in the world? The study therefore is to find answer to these questions.

Research Questions

How conducive is Lagos State primary schools classroom environment for technology-based instruction?

- 1 Are there adequate provisions for technological gadgets in primary school classroom?
- 2 Are Lagos State primary school teachers competent in ICT skills?
- 3 What is the utilization level of computer in instructional process of Lagos State primary schools?
- 4 How far have primary school pupils gone in operating computer for learning?

Research Methodology

The research design adopted in this study is a survey. The study focused on technological classroom a case study of primary schools in Lagos State. A structured questionnaire of twenty

five items was prepared by the researchers based on the research questions. The instrument was reviewed by other researchers, few copies were given out for pilot testing, result of which made us adjust the questionnaire items to ensure reliable and valid instrument before the final administration.

Sample and Procedure for data collection

The study covers two local education districts of Lagos State (Alimoso and Amuwo) with six schools randomly selected in both public and private schools of each of the local education districts with two hundred and forty (240) teachers from public schools and one hundred twenty (120) from private schools. Twenty public school teachers and ten private school teachers were randomly selected to respond to a structured questionnaire items on an individual basis because they are directly affected. Copies of the questionnaire were distributed out to teachers individually in the already selected schools. The twenty five questionnaires were analyzed based on their responses.

Data Analysis and Result.

Each of the research questions was answered serially based on the generated research statements which respondents' opinion agreed or disagreed with as represented by the data collected from samples from both public and private primary schools. The results from both schools are not the same in interpretation and that's why they are presented in two different tables.

Public Schools

S/N	Research Statement	Agreed	%	Disagreed	%
Q1	Lagos State Public primary School classrooms are not conducive for technology-based instruction.	143	59	97	41
Q2	There is no adequate provision for technology gadget in Lagos State primary schools classrooms.	218	90	22	10
Q3	The primary school teachers in Lagos State are not ICT competent.	198	82.5	42	17.5
Q4	There is no level of utilization of computer in primary school	198	82.5	42	17.5
Q5	Lagos State primary school pupils have no basic skills to use computer for learning.	222	92.5	18	7.5

Private Schools

S/N	Research Statement	Agreed	%	Disagreed	%
Q1	State Public primary School classrooms are not conducive for technology-based instruction.	49	39	72	61
Q2	There is no adequate provision for technology gadget in Lagos State primary schools classrooms.	70	58	50	42
Q3	The primary school teachers in Lagos State are not ICT competent.	82	68	38	32
Q4	There is no level of utilization of computer in primary school	58	48	62	52
Q5	Lagos State primary school pupils have no basic skills to use computer for learning.	53	44	67	56

Result and Findings

Research Question 1- The result from table 1 shows that 59% of the respondents agreed that Lagos State primary schools are not conducive for technology based instruction while 41% respondents disagreed on this point. This revealed that the classroom environment in Lagos State

public primary school is not conducive for technological based instruction. While the private school result is contradictory. It's only 39% of the population that agreed that the classroom environment is not conducive but 61% disagreed

Research Question 2- In table 1, 90% respondent from public schools agreed that there is no adequate provision for technology gadget in Lagos State primary schools classrooms while only 10% disagreed. In table 2, 58% agreed with is statement while 42% disagreed on this point.

Research Question 3- In table 1, 82.5% agreed that The primary school teachers in Lagos State are not ICT competent while 17.5% disagreed on this point in public schools. Table 2, showed 68% in agreement with this point while 32% disagreed.

Research Question 4- In table 1, 82.5% agreed that there is no level of utilization of computer in primary school of Lagos while 17.5% disagreed. In table 2, only 48% agreed while 52% disagreed with this point

Research Question 5- In table 5, 92.5% agreed that Lagos State primary school pupils have no basic skills to use computer for learning while 7.5%. In table 2, 44% agreed on this point while 56% disagreed.

Discussion

The study revealed the standard of classroom in Lagos State secondary public school as not been conducive for technology-based instruction. 59% respondents from public schools agreed to this but it is only 39% that agreed to this point in private schools. The implication of this is that there is a disparity in the public school environment and that of private schools. This agrees with Enueme, (2005), indicated that the child-friendly schools were equipped with better facilities than their counterparts. This investigations also revealed that there is no adequate provision of technological equipments and materials in Lagos State primary school, the evidence is drawn from the percentage of teachers in both public and private schools, the public 218 (90%) and 70 (56%) agreed with this statement respectively.

With 82.5% of teachers in public school and 68% of private school teachers in agreement that the primary school in Lagos State are not ICT competent shows the situation on ground is very pathetic. Can someone give what one does not possess? It is impossible! This result makes it imperative for immediate strategic professional update to make these teachers relevant and effective in their profession. 82.5% respondents in public schools agreed that is no level of utilization of computer in public primary schools though there is a little disparity with that of respondents in private schools while only 48% agreed to this. In essence, it can be deduced that a certain level of computer utilization is available in private primary schools probably because it can be closely monitored by the stake holders.

92.5% respondents in public schools agreed that Lagos State primary schools pupils have no basic skill to use computer while it was only 44% of private school teachers that agreed to that declaration. One can point out that the level at which technology-based classroom is been implemented in primary schools in Lagos State is infinitesimal in relation to the global expectation and drive in integrating ICTs to instructional system. The findings of this study support the findings of other researchers and investigators who have revealed that our classroom environment needed to be transformed along with global community technological trends in educational system. (Gbanu, 2007 and Egonwun, 2004). In addition, 'The indicator' Lagos State government monthly publications attest to this fact when emphasis is base on the fact that "education sector has been in the form of the reconstruction of structures that have fallen to different state of decay".

Conclusion

Some prominent facts could be established; it could be concluded that the classrooms environment in Lagos State bedevilled by some problems that hamper effective implementation of technology-based instruction. For instance, many classrooms in the public schools have no functional doors or window shutters; electricity failure in the nation is a Major enemy of electronics machinery utilization in schools because most of the schools are without electricity generator. Even where they have, the cost of maintenance is unaffordable.

That nonchalant attitude by school authorities made the development that is going on in educational system seems unattainable.

That stakeholder and private segment of the society can pose a serious challenge to public schools thus make them to sit up for better planning and proper implementation of school curriculum. This is evident in the better condition found in the private school as reported in the result on table 2, though not perfect enough to be classified as technology based schools.

Recommendations

Government, non-governmental bodies, philanthropists, and all stake holders in education should collaborate in promoting technology-based instruction by;

- 1 Empowering teachers to integrate ICT into their classroom by sponsoring, organising, and encouraging ICTs on-job training. That every teacher of both public and private schools must be exposed to technology-based instruction, teachers should be made to go for certificate course in technology-based mode of instruction.
- 2 Promoting collaborative technology-based curriculum development, making teachers to share ideas, methods and even instructional resources and materials especially on-line collaborating projects that can improve teaching and learning in participating schools.
3. Engaging in construction and rehabilitation of schools towards technology-based environmental compliance, that's classrooms, must be provided with necessary ICTs machine especially the computer system.
- 4 All schools should be provided with internet facilities and made accessible to all pupils at all levels of education, right from nursery level pupil should be exposed to different parts of computer for learning.

Therefore, for a nation to be transformed, the transformation of early child education is essential. Technology-based classroom will go a long way to eradicate the evil of child delinquency; it will stimulate children interest in education, arrest their attention against social vices.

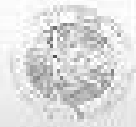
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