
**EDUCATIONAL MEDIA AND TECHNOLOGY: A PANACEA FOR EFFECTIVE
TEACHING AND LEARNING AMONG TRAINEE ADULT EDUCATORS IN
UNIVERSITY OF PORT HARCOURT**

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ABSTRACT: *Educational Media and Technology (EMT) has become an integral part of most teaching and learning process. In many developing countries like Nigeria, educators recognize the benefits of the integration of EMT, but due to some constraints like economic, political and poor infrastructure, many have not been able to equip themselves adequately. This study was an investigation of trainee adult educators' views on the use of EMT, during teaching practice exercise. One hundred undergraduate students of the Department of Adult and Non-Formal Education, University of Port Harcourt, who had undergone a teaching practice (practicum) programme in secondary schools and twelve lecturers of the department, were involved in this study. Four research questions guided the study while descriptive survey design was used for the study. Data were analyzed using frequency counts and opinionated views. Findings indicated that trainees appreciated the benefits of EMT in teaching and learning, although majority of them did not use EMT during their teaching practice exercise. There were problems of inadequate funding and functioning EMT facilities in their practicing schools. Finally, the study made some recommendations on how to promote the utilization of EMT to ensure effective teaching and learning.*

KEYWORDS: Educational Media and Technology, Teaching and Learning Process.

INTRODUCTION

Nigeria, inspite of its affluence in human and material resources is still being classified among countries with high level of illiteracy and poverty; it is also being classified as a developing country. This is because the country since independence in 1960, has failed to escape the wrath of economic instability, which is common in most developing nations of Africa. At independence, most African countries pledged to develop their economies, to democratize their political systems and promote social justice among their peoples (Ihejirika, 2013). These aims require among other things the broadening of educational opportunities and provision of Educational Media and Technology (EMT) materials, for their fulfillment.

Education is the bed-rock of any meaningful development. Unfortunately, the education sector in Nigeria has suffered from limited and stringent fiscal budgets and has been starved of both human and material resources (Ihejirika, 2013). The UNESCO recommended that 26 percent of the annual budget of every country in the world should go to education. Unfortunately, Nigeria is still far from this UNESCO recommendation. A' Aeth (1975) and Coombs (1989) described the situation of African development as educational dilemma. During the colonial era, schools were

significantly few which meant that fewer Africans had access to education which was deliberately designed to perpetuate hegemonic European dominance in the dual education system (Abraham, 2000; Chisaka & Mavundutse, 2006).

The role of educational media and technology (EMT) in teaching and learning is always paramount despite the subject, class one teaches and level of learners or students. Educators, have revealed that effective use of EMT materials is better than lengthy explanations. It makes teaching and learning easier and more meaningful. Research has also shown that the use of various teaching media and appropriate teaching method is better than lengthy explanations. It is vital for concept formation in learners. Besides focus on teacher qualifications and quality education, there has been debate centred on material provision. Opeke (1982) and Olowe (1991) as cited in Bello (2008:15) posited that using educational media and technology in the teaching and learning process makes instruction easier and meaningful. Montegomery (1995) submitted that the use of multi-media computer software in engineering enhanced learning by students with different learning styles. He also viewed that multi-media fill in the gaps created by dichotomy in teaching and learning styles. Some teaching/learning styles, like demonstration style, points the need for using media and technology in making teaching and learning more meaningful and a dialogue process.

Knowledge and application of instructional media is a crucial part of every teaching and the provision and effective use of instructional media and technology distinguishes a superior school from an inferior one. Oyedele, Rwambiwa and Mamvutu (2013) revealed that several studies have examined the availability and use of EMT as crucial in the teaching and learning process. Peresuh (1996) observed that learners confessed that teachers' use of instructional media in teaching/learning made them understand what was thought.

In tandem with the above, Obanya (1985), Campbell and Dlamini (1994), asserted that teaching using media and technology can extend the opportunities for learning far greater than chalk and talk. The learner will be able to piece together patterns of new concepts using multiple sensory dialogues. Much of the stimulation generated by the senses depend on the media the teacher uses (Brigg & More, 1993). The sequence in which a learner encounters materials has a direct effect on mastery, retention and recall for use. Audio media, which include CDs, DVDs, radios etc, have the power to super-change the meanings of words and sounds which is absent in print media.

Statement of Problem

Education is one of the basic foundations for human and societal development. EMT is the technology to produce, manipulate, store, communicate and or disseminate information to the learner. Unfortunately, the inadequate and non-availability of EMT materials in practicing centres has created some challenges to both learners and teachers.

As a response to this situation, there is an increasing emphasis on provision and improvement of EMT materials. The concern or thrust of this study therefore was to investigate the relative effect of EMT materials in a trainee adult education programme in the University of Port Harcourt.

Purpose of the Study

The purpose of this study was to investigate educational Media and Technology (EMT) as a panacea for effective teaching and learning by trainee adult educators at the University of Port Harcourt. With this purpose in mind, the study was guided by the following four objectives:

1. To investigate how trainee adult educators perceive the use of EMT in teaching and learning.
2. To investigate whether trainee adult educators can conveniently produce and effectively use EMT materials in teaching and learning.
3. To ascertain whether there are adequate and functioning EMT materials in practicing schools or centres.
4. To investigate whether there is adequate funding for provision of EMT materials.

Research Questions

Based on the above objectives, the following research questions were formulated to guide the study:

1. How do trainee adult educators perceive the use of EMT materials in teaching and learning?
2. Can trainee adult educators conveniently produce and effectively use EMT materials to enhance teaching and learning?
3. Are there adequate and functioning EMT materials in practicing schools/centres?
4. Is there adequate funding for provision of EMT materials?

METHODOLOGY

To critically analyze the effectiveness of EMT in the teaching and learning process, this study adopted the descriptive survey research design. This design was chosen because the study involved collection of data from participants to answer some specific research questions formulated for the study. A researcher designed instrument (questionnaire) tagged “Educational Media and Technology, a strategy for effective teaching and learning (EMATFETAL)” consisting of fourteen items was used for the study. The instrument which was structured using a modified four point Likert-type scale of strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD) was submitted for review to a panel of experts in educational technology and adult education. After incorporating the panel of experts’ inputs, one hundred and twelve copies of questionnaire were administered to one hundred adult education students who had been exposed to teaching practice exercise and twelve lecturers of the department. All were completed and returned. This was possible because the researcher is one of the lecturers in the department. The lecturers’ views were sought because it was assumed they would give more relevant responses due to their privileged roles as supervisors and assessors of students during their teaching practice exercise. Data were analyzed using frequency analysis and opinionated views. The percentage for each response against the total number of responses was calculated.

Presentation and Analysis of Result

The following tables present the respondents’ (trainee adult educators’ and lecturers’) views and perceptions on the effectiveness of Educational Media and Technology (EMT) in the teaching and learning process.

Research Question I: How do trainee facilitators perceive the use of EMT materials in teaching and learning?

Table 1: Respondents views on perception of the use of EMT materials in teaching and learning. (N= 112)

S/N	Items	Responses of Respondents (%)				
		SA	A	D	SD	
1.	EMT materials are considered important because they aid teaching and learning.	85 (75.9%)	27 (24.1%)	0	0	100%
2.	They make teaching and learning more effective and meaningful.	75 (67%)	37 (33%)	0	0	100%
3.	They make learners to understand what was thought.	60 (53.6%)	52 (46.4%)	0	0	100%
4.	They help learners to remember and retain what was thought.	50 (44.6%)	62 (55.4%)	0	0	100%
5.	They promote healthy teaching and learning environment.	47 (42%)	65 (58%)	0	0	100%

Table 1 shows that all the respondents agreed with the five items in the table. This shows that EMT materials are perceived as useful and important in the teaching/learning process.

Research Question 2: Can adult trainee facilitators conveniently produce and effectively use EMT materials to enhance teaching and learning?

Table 2: Respondents' views on whether adult trainee facilitators can conveniently produce and effectively use EMT to enhance teaching and learning

S/N	Items	Responses of Respondents (%)				
		SA	A	D	SD	
6.	Can you produce EMT materials for effective teaching and learning?.	10 (8.9%)	15 (13.4%)	80 (71%)	07 (6.3%)	100%
7.	Did you have access to EMT materials in your practicing school?.	12 (10.7%)	4 (3.6%)	74 (66%)	22 (19.6%)	100%
8.	Did you actually use EMT materials during teaching practice exercise?.	12 (10.7%)	4 (3.6%)	74 (66%)	22 (19.6%)	100%
9.	Does EMT materials exist in schools where you did your teaching practice programme?.	8 (7.1%)	12 (10.7%)	65 (58%)	27 (24%)	100%

Table 2 reveals that 10(8.9%) of the respondents strongly agreed with item 6 and 15(13.4%) agreed while 80(71%) of them disagreed and 7(6.3%) strongly disagreed. Item 7 in the table indicates that 12(10.7%) of them strongly agreed, 4(3.6%) agreed while 74(66%) disagreed and 22(19.6%) strongly disagreed. Item 8 has the same responses as shown for item 7. For item 9, 8(7.1%) of participants agreed and 65(58%) disagreed, while 27(24%) strongly disagreed. From this table, it

is revealed that adult trainee educators cannot produce some EMT materials but can effectively use them to enhance teaching and learning.

Research Question 3: Are there adequate and functioning EMT materials in practicing centres/schools?

Table 3: Respondents' views on whether there are adequate and functioning EMT materials in practicing centres/schools

S/N	Items	Responses of Respondents (%)				
		SA	A	D	SD	
10	Did you use cassette recorders for teaching and learning in your practicing school?.	0	2 (1.8%)	68 (60.7%)	42 (37.5%)	%
11	Did you use overhead and LCD projectors for teaching and learning during your teaching practice programme?.	0	0	52 (46)	60 (53.6)	%
12	Are there functional digital and still cameras for teaching and learning in your centre?.	0	0	40 (36)	72 (64.3)	%

Table 3 shows that 68(60.7%) of the respondents disagreed with item 10. 42(37.5) of them strongly disagreed and only 2 (1.8%) agreed with it. The table indicates that all the respondents disagreed with Items 11 and 12.

From this table, it is clearly revealed that there is inadequate and functioning EMT materials in practicing centres/schools.

Research Question 4: Is there enough funding for the purchase of EMT materials?.

Table 4: Respondents' views on funding for the purchase of EMT materials.

S/N	Items	Responses of Respondents (%)				
		SA	A	D	SD	
13	Funds provided for the purchase of EMT are inadequate?	62 (57.1)	28 (25)	10 (8.9)	12 (10.7)	%
14	Practicing centres/schools fund provision of EMT materials.	5 (4.5)	7 (6.3)	90 (80.1)	10 (8.9)	%

Table 4 reveals that 62(57.1%) of the respondents strongly agreed with item 13, 28(25%) agreed and 10(8.9%) disagreed while 12(10.9%) strongly disagreed. The table also shows that 5(4.5%) and 90(80.1%) disagreed and 10(8.9%) strongly disagreed to item 14 respectively. This table shows that funding for EMT materials is inadequate.

DISCUSSION

From responses to research question 1, it is evident that both trainee adult educators and lecturers view the use of EMT as important in improving the quality of teaching and learning. One of the students affirmed to this when he said “EMT helps convey the intended instruction effectively to learners”. Educators always emphasize use of media (teaching aids) in classroom lesson delivery to aid cognitive formation. Trainee students gave some reasons why EMT is important which include improving the quality of instructions, appealing to all the senses and making lesson ideas and concepts more concrete, meaningful, clearer and understandable. Lecturers indicated that from their experiences during supervision of students on teaching practice (practicum) exercise, trainee facilitators rarely used EMT, but limit themselves to chalkboard, a few models, commercially printed media such as charts, etc, as the case may be. One of them summed up the significance of EMT when he reported that “educational media and technology ensures that the learner receives, understands, retains and applies the experiences gained to achieve the lesson objectives”. This finding is in line with the views of Obanya (1985), Campbell and Dlamini (1994), Peresuh (1996), Abraham (2000), and Oyedele, Rwambiwe and Mamvuto (2013) who contended that EMT makes teaching and learning more effective.

Furthermore, findings from tables 2 and 3 reveal that there were inadequate EMT materials in schools. Majority (85%) indicated general inadequacy of EMT to enhance teaching and learning. Privately owned schools were found to have more EMT materials than government owned schools. It was also indicated that besides the chalkboard, white board, few charts, photographs, maps, some equipment were available in the schools. Lesson delivery was largely by lecture method with little dialogue, which could affect learners’ concept formation. Again, some equipment expected to be in schools such as cassette recorders, overhead and LCD projectors, video cassettes, video recorders, digital and still cameras, etc, were not available. The available ones were mostly obsolete and need to be replaced. Most of the available computers were not connected to the Internet. This finding is consistent with Yakeen (2008) and Brigg and Moore (1993) who contended that audio media, which include CDs, DVDs and radios has the power to super-change the meanings of words and sounds which is absent in print media. Inadequacy of these materials frustrates teaching and learning.

Finally, the findings as shown on table 4 reveals that poor funding is one of the major problems that prevent the purchase of appropriate EMT materials. 82% of the respondents agreed that there were inadequate funds for the purchase of EMT materials. The responses is skewed towards inadequate funding which has affected practicing centres or schools. This view supports respondents’ views on the inadequacy of fund for EMT materials in practicing schools.

CONCLUSION

Based on the results of the study, it is concluded that the use of EMT materials in achieving quality education cannot be over-emphasized especially now that the government is emphasizing seriously on quality education in Nigeria. They improve the quality of teaching and learning.

RECOMMENDATIONS

Based on the results and conclusion, the following recommendations are made.

1. Trainee adult educators should have the initiative to produce, improvise and use EMT materials effectively and efficiently to aid teaching and learning.
2. The government should provide adequate fund for the purchase and maintenance of EMT materials and should replace the old ones where and when the need arises.
3. Schools should buy more materials like video cameras, television sets, video recorders, etc, for effective teaching and learning.

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