Availability of Electronic Media for Learning Geography in a College of Education at Bauchi State, Nigeria

By

Yahaya, H. Joel and Mustapha, Mohammed
Department of Curriculum and Instruction,
School of Education,
Aminu Saleh College of Education Azare, Bauchi State.

ABSTRACT
This study investigated the availability of electronic media for learning Geography in Aminu Saleh College of Education Azare, Bauchi State. Two Research questions and one hypotheses were formulated to guide the investigation. The researchers employed the descriptive survey research design with a sample of 118 from a population of 596 Nigeria Certificate in Education (NCE) students of Geography Department, Aminu Saleh College of Education Azare. Check list and structured questionnaires were used as instrument of data collection. 1 check list and 118 questionnaires were distributed to the students; 118 questionnaires were returned. Data collected were analysed with the use of descriptive statistics (mean score and standard deviation), ANOVA and T-test. Findings showed that electronic media devices such as internet satellite television, interactive white board, fax machine and computer are of small quantity which poise as a challenge for learners of geography while other electronic media devices such as Radio, Television and Multimedia projector are of high quantity for learning Geography in the study area. Base on this finding the study made the following recommendations; the State Government should make adequate procurement and provision of electronic media to the Institution, in addition the state government should liaise with donor agencies on the enhancement of the Educational system, so as to make electronic media sufficient in our Institutions of learning.

Keywords: Electronic Media, and Learning Geography.

INTRODUCTION
In view of previous studies, the use of electronic media to enhance teaching and learning process has great significance or importance to students learning outcome, it has been discovered that the use of instructional electronic devices varies from subject to subject as well as the content.

One of the important roles of the faculties of education is to make sure that the prospective teacher candidates can use the field-specific technologies effectively in their classrooms and they are qualified enough to transfer this technology effortlessly whenever they need to practise in their daily lives (Gomez et al., 2008).

Multiple electronic devices are often needed to sustain the student interest, make learning interesting and enhance maximum understanding. The factors that influence change of electronic devices ranges from nature of the course content, students’ responses and interest of the students.
Mangal and Mangal (2014) state that the products are the outcome of the processes, and processes depend heavily on the type of strategies, tactics and means chosen and employed. Teaching processes, for its success, demand effective strategies, means and materials.

Electronic media is defined as any electronic device through which one can share information for the audiences viewing and the information are broadcasted electronically for wider communication (Carl Xie-Connell, 2015). This is in contrast to the static media (mainly print media), which today are produced electronically, but do not require electronics for the information to be accessed by the end user in the printed form. Primarily, electronic media includes fax, radio, television, computer, multimedia projectors and smart boards. Traditionally, the radio and television are familiar to the general public and have been commonly used in education. (Mangal & Mangal 2014). The advancement in technology brought about the development and use of modern technology like the computer, multimedia projector and the smart board into the teaching and learning process. These forms of media contain and transmit information in different forms. The information on radio (audio media) they are the instructional materials for learning that appeal to the sense of hearing (Omorodion 2016). Learner listing to and hear sounds but they can’t see the presenter. The television comes in audio and visual format (audio visual aids). Audio literally means hearing and visual is found in seeing. Hence, such aids which endeavour to make the knowledge clear to us through our sense are called “audio and visual aids.” This learning materials make the learning situations as real as possible and gives us first-hand knowledge through the organs of hearing and sight (Ajayi 2018). On the other hand, the information on the computer, multimedia projector and the smart boards combines the audio and visual content of radio and television in addition to text and animation. All these developments have brought about the ease in the acquisition and dissemination of information.

Electronic media plays a vital role in society and particularly in education. For instance, electronic media allows information and ideas to travel instantly from its source to the public through the radio, television and internet technologies. This has given billions of people access to information that they previously would not have had access to.

The radio and television and the internet are useful tools for learning Geography. For example, the climatic conditions and relief features of different regions across the world, which are far and remote to the learners of Geography in Nigeria and particularly in Aminu Saleh College of Education Azare, Bauchi state, can be viewed through the television and the internet. The learning of Geography involves undertaking field trips. However, because of limited resources, distance and time factors, it is impossible for learners to embark on such trips where they could have first-hand information on the different geographical locations of the world. As such the radio, television and the internet have become useful tools for accessing such vital information.

The fact that electronic media is useful and important in the learning of Geography is not sufficient. It is important to ascertain whether such media are available to the learners of Geography.

In a study conducted by Warschauer (2010) found that three students to use a computer in U.S. public schools as at 2008. In most developing nation like Nigeria this is far from reality. Over the last few years, there has been a rapid growth in the range and sophistication of new Electronic media in learning Geography within the developing countries. In particular, computer technology has been used to improve the quality of Geography education in schools because of its robust nature.
in displaying graphics and simulations. Positive outcomes of using computer technology in education have led many governments to initiate programs for the integration of Computer technology into schools. The situation in ASCOE Azare Bauchi State is yet to be established.

The Nigerian educational system like any other contemporary system is becoming more and more complex. The complexity is attributable to many factors especially the declining quality of learning Geography. Other factors include increase in enrolment and falling standards, failure in secondary school certificate examination. Many potential geniuses are bored with ill-equipped classrooms saddled with untrained teachers and finally the lack of Electronic devices for learning.

The issue of the deteriorating state of learning Geography can never be over-emphasized, as it is evident that the educational system is faced with challenges, which need to be addressed. Most of Geography learning processes that takes place in schools lacks the learners access to electronic media, as this has created a wide gap between modern Geography and the learners, as learners may need to see, feel, touch and smell if necessary during lesson delivery.

In the same vein, electronic media devices meant for learning are not readily available as most schools are saddled with the non-availability of the electronic media (Enyi, 2012; Oyetunde, 1991). In the light of the foregoing, it is evident that for any educational system in need of quality or enhancement, the state of affairs of the present situation is not supportive of the drive. What then is responsible for the non-availability of electronic media for learning geography is the concern of this study.

**Purpose of the Study**
The purpose of this research is to investigate the availability of Electronic Media for learning Geography in Aminu Saleh College of Education Azare. Specifically, the study will;

1. Determine the availability of Electronic Media for learning Geography in Aminu Saleh College of Education Azare.
2. To ascertain the challenges of availability of electronic media for learning Geography among students in Aminu Saleh College of Education Azare.

**Research Questions**
The following research questions are raised to guide the research:

1. To what extent are Electronic Media available for learning Geography in Aminu Saleh College of Education Azare?
2. What are the challenges facing the availability of electronic media for learning Geography among students in Aminu Saleh College of Education Azare?

This study adopted the descriptive survey research design. This design is suitable for the study because data was collected from the NCE undergraduate students in Aminu Saleh College of Education Azare, Bauchi state of Nigeria through the use of a questionnaire. It is suitable for use where samples are large and it allows for the use of inferential statistics in comparing subgroups within the sample (Cohen, Manion & Morrison, 2011).

The population for the study comprised all the NCE Geography students of the College with population estimate of 596 in the admission office of the college 2016/2017 session. 118 NCE Geography students of the college was drawn randomly from the target population of 596 as the
sample of the study. The instruments for data collection in this study was a check list and a structured questionnaire their names are;
2. Availability of Electronic Media questionnaire (AEMQ).

CLAEMLG is a 10 items while AEMQ is 18 items questionnaire developed by the researcher. The CLAEMLG is made up of two sections with 10 Items. The sections are tagged section A and B. Section A is on the name of the institution where the research work is going to be conducted. While section B is made up of a table listing down the names of the Electronic Media Devices the researcher is interested in checking how available they are and their quantity in Aminu Saleh College of Education Azare while the other instrument is name AEMQ and is made up of five sections with 18 items. The sections are tagged section A, B, and C.

Section A is on personal data of the respondents. It seeks the background information about the respondents. The information is on level. The respondents were required to tick the needed information in the spaces provided. Section B seeks to find out the extent of availability of electronic media for learning Geography in Aminu Saleh College of Education Azare. It consists of 9 items and the responses were based on the four-point Likert type rating scale of Much Available=MA(4); Available= A(3); Few Available=FA(2); Not Available=NA(i). Section C sought to determine the challenges facing the availability of electronic media for learning Geography in Aminu Saleh College of Education Azare. The section has 9 items and the responses were based on the following four-point Likert type rating scale of Strongly Agreed=SA(4); Agreed=A(3); Disagreed=D(2) and Strongly Disagreed=SD(i) were provided in the instrument for the respondents to select the best option that represent their opinion.

The draft copy of the instruments was given to three lecturers from the department of Geography of the college for face validation. The face validation of the instrument was done by the experts after whom the instrument was administered to the respondents. The researchers instrument (CLAEMLG & AEMQ) was administered to the respondents with the help of three research assistants who helped in the administration and retrieval of the instrument from the respondents. Out of the 118 questionnaire distributed to the respondents, 118 copies of the instrument were retired representing 100% return rate.

In order to analyse the data and make inferences for the study, the researchers used descriptive statistics (Mean), T-test and ANOVA. These statistical methods were used to test the hypotheses to see the level of relationship and influence among the variables. Mean and standard deviation were used to answer the research questions. The data collected was analysed using Statistical Package for Social Sciences. Statistical Package for Social sciences is computer software used in the analyses of social sciences research. The software was used to establish the psychometric properties of the questionnaire. It also analyses simple percentage and frequencies for the variables. The software tested the hypotheses postulated in the study. The level of significant is 0.05 alpha level.

RESULTS

The finding from the study were obtained from the analysis of the data collected and presented as follows;
Research Question 1: To what extent are Electronic Media available for learning Geography in Aminu Saleh College of Education, Azare?

Table 1: Quantity of available electronic media in Aminu Saleh College of Education, Azare.

<table>
<thead>
<tr>
<th>S NO</th>
<th>ITEMS</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Radio</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Television</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Computer</td>
<td>147</td>
</tr>
<tr>
<td>4</td>
<td>Fax</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Multimedia projector</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Interactive white board</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>DVD player</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Internet connectivity</td>
<td>147</td>
</tr>
<tr>
<td>9</td>
<td>Satellite television</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Researcher’s field work.

Result of the analysis in table 1 shows electronic media and their quantity available in the college, from the figures obtain above one can see that computer and internet connection are of high quantity which indicate that computer and internet connection are not a challenge to availability of electronic media in the institution while other electronic devices like radio, television, fax machine, multimedia projector, interactive white board DVD player satellite television are of low quantity which poise as a challenge to learning geography at the study area.

Table 2: Mean and Standard Deviation of stakeholder’s opinion on the Availability of Electronic Media for Learning Geography in Aminu Saleh College of Education, Azare.

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>MEAN</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Radio</td>
<td>2.72</td>
<td>1.15</td>
</tr>
<tr>
<td>2</td>
<td>Television</td>
<td>2.94</td>
<td>1.007</td>
</tr>
<tr>
<td>3</td>
<td>Computer</td>
<td>2.25</td>
<td>1.117</td>
</tr>
<tr>
<td>4</td>
<td>Fax</td>
<td>1.74</td>
<td>.938</td>
</tr>
<tr>
<td>5</td>
<td>Multimedia projector</td>
<td>1.93</td>
<td>1.107</td>
</tr>
<tr>
<td>6</td>
<td>Interactive white board</td>
<td>1.78</td>
<td>.988</td>
</tr>
<tr>
<td>7</td>
<td>DVD player</td>
<td>2.85</td>
<td>1.144</td>
</tr>
<tr>
<td>8</td>
<td>Internet connectivity</td>
<td>2.47</td>
<td>1.115</td>
</tr>
<tr>
<td>9</td>
<td>Satellite television</td>
<td>2.24</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Source: Researcher’s field work.

Result of the analysis in table 2 shows responses of respondents toward the extent of the availability of Electronic media for the learning of Geography in Aminu Saleh College of Education in Azare (ASCOE). From the responses Computer, Fax machine, Interactive board, DVD player and Internet connectivity are consider as major factors affecting the availability of Electronic media while the Radio, Television and Multimedia projector are available for learning Geography in the
study area. This shows that while some Electronic media are available in a high quantity others are in low quantity; therefore, there is the need to provide those materials that are in a low quantity for learning of Geography in ASCOE, Azare.

Research Question 2: What are the challenges facing the availability of electronic media for learning Geography among students in College of Education, Azare?

Table 2: Mean and Standard Deviation Result on Challenges Facing Availability of Electronic Media for Learning Geography among students of College of Education, Azare.

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEM</th>
<th>MEAN</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Radio is not sufficiently supplied for students learning Geography.</td>
<td>2.50</td>
<td>1.036</td>
</tr>
<tr>
<td>2</td>
<td>The purchase of television is not funded by the school management for Geography learners.</td>
<td>2.79</td>
<td>.846</td>
</tr>
<tr>
<td>3</td>
<td>Computer is expensive to afford for students learning Geography.</td>
<td>2.91</td>
<td>.978</td>
</tr>
<tr>
<td>4</td>
<td>Fax machine is not available for Geography learners as a result of its high cost of purchase.</td>
<td>2.85</td>
<td>.948</td>
</tr>
<tr>
<td>5</td>
<td>Multimedia projector is expensive to afford for Geography students.</td>
<td>269</td>
<td>1.05</td>
</tr>
<tr>
<td>6</td>
<td>Lack of funding make interactive board not available to Geography learners.</td>
<td>2.60</td>
<td>1.039</td>
</tr>
<tr>
<td>7</td>
<td>DVD player is an old medium for learning Geography.</td>
<td>2.40</td>
<td>1.031</td>
</tr>
<tr>
<td>8</td>
<td>Lack of sufficient funding makes internet connectivity not available to Geography learners.</td>
<td>2.69</td>
<td>1.066</td>
</tr>
<tr>
<td>9</td>
<td>Lack of satellite technology in the environment makes satellite television not available to Geography students.</td>
<td>2.65</td>
<td>1.081</td>
</tr>
</tbody>
</table>

Source: Researcher’s field work

The analysis in table 2 shows responses of respondents towards challenges facing the availability of electronic media for learning of Geography. From the responses it is evident that all the items raise pose a great challenge facing the availability of Electronic media. Again from the response the mean of DVD player as an old medium for learning of Geography is a challenge for learning. Hence there is the need to improve and put more effect towards the use of Electronic media for the learning of Geography in the study area.

DISCUSSION OF FINDINGS

The purpose of the study was to determine the Availability of Electronic Media for learning Geography in Aminu Saleh College of Education, Azare, Bauchi state of Nigeria.

Finding from a check list that was establish by the researchers to ascertain the quantity of electronic media devices that are available in the institution reveals that computer and internet connection are of high quantity while other devices like radio, television, fax machine, multimedia
projector, interactive white board DVD player satellite television are of low quantity according to the researcher expectation base on the figures on the check list which went contrary to the response of the despondence.

Findings from research question one reveals that some Electronic media like Computer, Fax machine, Interactive board, DVD player and Internet connectivity are considering as major factors affecting the availability of Electronic media while Radio, Television and Multimedia projector are available for learning Geography in the study area. This shows that while some Electronic media are available in a high quantity others are in low quantity; therefore, there is the need to provide those materials that are in a low quantity for learning of Geography in ASCOE, Azare.

This is also in agreement with the opinion of (Apagu and wakili 2015) who found that Electronic media are lacking in some colleges for teaching and learning.

Data analysis regarding research question two shows that there are challenges in the availability of Electronic media for learning of Geography. The result revealed that Multimedia projector is expensive to afford for geography students, lack of funding make interactive board not available to geography learners, DVD player is an old medium for learning geography, lack of sufficient funding makes internet connectivity not available to geography learners, lack of satellite technology in the environment makes satellite television not available to geography.

This could be ascertaining from the responses of the respondents. This also confirmed the opinion of Amuchie (2015) who state that the challenges of Electronic media ranges from availability of electricity, shortage of Electronic media and qualified man power to handle the Electronic media in schools. Similarly, findings from research question shows that there is the need to address the challenges facing availability of Electronic media so as to improve the performance of students in Geography in the study area.

RECOMMENDATIONS

In light of the findings of the study the researcher recommends that:
1. There is the need for the college to diversify its source of electricity supply in other for projected Electronic media to be utilize for learning and to move with changing technology.
2. There is a great need for the state government to give attention to education as a means of bringing enlightened and brighter future generation. This could be done by adequate funding of the system.
3. The state government should make adequate procurement and provisions of Electronic media to all the higher institutions in the state.
4. In addition, the state government should liaise with donor agencies on the enhancement of the educational system; agencies such as the World Bank, UNESCO and many others for donation of Electronic media to schools.

CONCLUSION

The findings of the availability of electronic media for learning of geography in Aminu Saleh College of Education, Azare revealed that Electronic media are reliable tools in the learning
of Geography. It implies that the only answers to Electronic media challenges in the College is the provision of fund for the procurement of some of this gadget that are not available. This will significantly reduce the high rate of student’s failure in Geography department. A reduction in the failure rate will also mean a reduction in all other related problems such as high rate of drop out.

REFERENCE