

A SURVEY ON AVAILABILITY OF MULTIMEDIA RESOURCES FOR TEACHING SOCIAL STUDIES IN COLLEGES OF EDUCATION IN NORTH-CENTRAL NIGERIA

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Abstract

The study examined the Availability of Multimedia Resources for Teaching Social Studies in Colleges of Education in North-Central Nigeria. The study used male and female lecturers of Social Studies selected from state and federal colleges of education in the study are (north-central, Nigeria). Furthermore, survey research design is used. The study used census purposive sampling because of the manageability of the population of the study. The study also used structured questionnaire titled "Availability, Organization and Utilization of Multimedia Resources Questionnaire (AUMREQ) as data collection instrument. The instrument is validated by supervisors and statisticians for content and face values. The study pilot tested the instrument and it is certified as statistically fit for the main work. However, the study used independent samples t-test to validate the study's null hypotheses and arithmetic mean, standard deviation to answer the research questions. The study among other thing discovered that there is no significant difference in the opinions of male and female respondents (Lecturers) on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone. The study made some recommendations among which is the need for states and federal government to allocate funds adequate for the procurement of multimedia resources to facilitate effective communication and transaction between lecturers (male and female) and the students in Social Studies lessons.

Keywords: Availability, Multimedia Resources, Social Studies, Teaching, Colleges.

Introduction

The introduction of Information and Communication Technology (ICT) in teaching remains one of the important dimensions of human technological advances in contemporary times. It is regarded as one of the main innovations in the education sector due to the fact that it has the potential to bring about substantial system-wide benefits in terms of improving the quality of teaching and learning process. In the light of this, Abdallah (2013) stated that there is of course a need to emphasize the added value that ICT can bring about to teaching and learning and that effort should be geared towards effective development of learning resources. The renewed interest and the euphoria in ICT today might have been borne out of the fact that Nigeria does not want to lag behind in the global race that is basking or being controlled by the upsurge of ICT revolution in all aspects of life including education. Many countries around the world have introduced Information and Communication Technologies (ICTs) into schools via different courses of action. Their use is also underlined by Organization for Economic Cooperation and Development [OECD] (2001) as a necessity for improving quality in teaching and learning. Technologies such as multimedia are seen to have special significance for teacher education because of the growing expectation that teachers must be technologically literate in order to provide relevant instruction in schools. Many scholars argued that it is the responsibility of teacher education programme to produce students who are confident and competent users of technology because students needed to see technology modelled for them by their teachers (Davis, Willis, Fulton, & Austin, 1995). Teacher educators faced mounting pressure to be skilled in the use of a range of technologies in order that these skills are passed on to prospective teachers in school systems. Interactive multimedia resources are examples of these technologies.

The term multimedia means more than one media. Multimedia are instructional programmes that can be highly interactive and feature combinations of sound, animation, video, graphics, and text. According to Hostetler (2001), "Multimedia is the use of computer to present and combine text, graphics, audio and video with links and tools that let the user navigate, interact, create and communicate". In other words, multimedia is the combination of various digital media, into an integrated multi-sensory interactive application or presentation to convey information to an audience, (Butcher and Powell 2005; Demodharan and Rengaranjan 2007). Therefore, multimedia is a learning tool that allows learners to organize, represent and construct knowledge in multiple modalities that

include text, audios, graphics, animation and videos, (Wang 2006: 316). In addition, multimedia programmes do not necessarily require Internet access.

With multimedia technology becoming such an integral part of students' lives, educators are incorporating it into projects to promote learning in their classrooms. The trend toward technology enhanced classrooms has escalated quickly at the turn of the millennium in Nigeria and students are increasingly becoming tech-savvy day by day. Students are using multimedia to connect with different cultures and societies that can broaden their learning experience, (Warschauer, 1999). Technology provides an innovative way to reach and collaborate with students and educators all over the world. However, not only is technology useful in communicating with others, it also provides unique ways to complete assignments. Additionally, students learn better and faster when they are actively engaged in their learning. Digital media can be a great vehicle for student engagement with classroom technology...", (Quinones, 2010:28).

Social Studies as a field of study is not excluded in whatever effects ICT is making in the educational arena. Technology's capacity to reach learners in any place and at any time has the potential to promote revolutionary changes in the educational paradigm. This means eliminating the premise that learning time equals classroom time. Students can be encouraged to revisit the lessons/topics to reinforce learning without active intervention by teachers, (Dania & Enakrire 2012). Buttressing on the above, Mezieobi (2013) posits that ICT has made possible effective Social Studies instruction by institutionalized electronic field trip among others. According to Acikalin & Duru (2005), special attention has been given to the adaptation of computer technology into teaching-learning process for effective learning and increasing students' achievement. In recent years, it has been realized that there is an immense benefit in applying computer technology in the Social Studies classroom. There is an increasing research on the effectiveness and benefits of the integrating computer technology in education in recent years. Sheffield (1996) stated that as a result of the recent developments in technology, computers and the Internet have become more important teaching tools in the Social Studies classroom. In addition, Whitworth & Berson (2003) point out that, "within the Social Studies, technology has served a dual role as an important instructional tool that may have a significant effect on the global, political, social, and economic functioning of society". According to Whitworth and Berson (2003), as a method or topic instruction, computers and technology may have significant impacts on Social Studies Education.

Nonetheless, it is quite disturbing that the fact that ICT facilities (multimedia resources) are in gross short supply particularly in some Colleges of Education and there is dearth of Social Studies teachers versed in the knowledge of the usage and application of ICT. The few that have the knowledge do not often utilize it for teaching and learning purposes. The government has not demonstrated adequate commitment to ICT infrastructure (multimedia inclusive) provision in Nigeria's tertiary institutions. At best governments in Nigeria are mouthing ICT without adequately funding it to engineer ICT revolution in the classroom. It is against this background that this study evaluates the availability of multimedia resources for teaching Social Studies in colleges of education in North-Central Zone, Nigeria.

Objectives of the Study

The main objective of this study is to evaluate the Availability of Multimedia Resources for teaching Social Studies in Colleges of Education in North-Central Zone, Nigeria. The study is guided by the following specific objectives:

- i. To determine the opinions of male and female Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone;
- ii. To ascertain the opinions of state and federal college lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone;

Research Questions

The study answers the following research questions:

- i. What is the difference in the opinions of male and female Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone?
- ii. What is the difference in the opinions of state and federal colleges of education Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone?

Research Hypotheses

In the light of the above, the following hypotheses are formulated for the study:

- i. There is no significant difference in the opinions of male and female Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone;
- ii. There is no significant difference in the opinions of state and federal colleges of education Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone.

Methodology

This study used survey research design. The purpose of survey research design is for researchers to describe the attitudes, opinion, behaviours or characteristics of the population based on the data collected from a sample or a population, (Muhammad, 2013).

This study specifically used cross-sectional type of survey research design. According to Hulley, Cummings and Newman (2007) "in a cross-sectional study all the measurements are made at about the same time, with no follow-up period. It is usually employed by collecting data and describing in systematic manner the characteristic features or facts about a given population from a few people or items considered to be representative of the entire group, Akuezilo & Agu in (Salihu and Adamu 2016).

The population for this study consists of Social Studies Lecturers of colleges of education in North-Central Geo-political Zone-Nigeria. There are a total of 127 Lecturers spread across 11 public colleges of education in North-Central Zone of Nigeria.

The study used census sampling in data collection. This is due to the fact that the population of the study is easily accessible and manageable (127) the entire population is covered. This is aimed at adding credibility to the study. According to Alfa (2016) and Abubakar, Salihu & Usman (2016) it is possible to get deep insights into the phenomenon you are interested in when total population is used. With such wide coverage of the population of interest, there is also a reduced risk of missing potential insights from members that are not included. According to Alfa (2016) a total population could be used for the following reasons; when the population size is relatively small and/or the population shares an uncommon characteristic(s). In this respect, the population of the study is considered manageable by the researcher and for the need to balance the uncommon features of the respondents.

The study used structured questionnaire titled "Availability, Organization and Utilization of Multimedia Resources Questionnaire (AOMUXQ)". Questionnaire according to Shehu (2015) and Muhammad (2014) is the statement which the respondents have to react in writing so as to find out their feelings, and opinion on the designed items in the questionnaire.

The instrument is designed based on four point modified Likert scales; section 'A' centres on the availability of multimedia resources for teaching Social Studies in colleges of education which has the following scales (Fully Available=FA, Partially Available= PA, Unavailable=UA & Uncertain=UC). The instrument was vetted by research supervisors and other experts in Computer Science and English Language and Literary Studies Department from Ahmadu Bello University, and Federal College of Education, Zaria.

The consistency of the instrument was ascertained through pilot study. In order to determine reliability co-efficient of the instrument, Cronbach alpha method for determining reliability coefficient is used. This was conducted at Federal College of Education, Zaria using 30 Social Studies Lecturers. Hence, 0.74 was realised. The study used the assertion of Danjuma and Muhammad (2011) which stress that an instrument is reliable if its reliability co-efficient lies between 0.64 and 1. In the light of this, the research instrument is reliable for the main work.

The study used percentage and frequency counts to present the basic personal information of the respondents. The arithmetic means and standard deviations were used in answering the questions raised by the study. In addition, the study used independent samples t-test to validate the null hypotheses.

Results

Cumulative Mean Opinions of Respondents

Tables 4 present the cumulative mean responses of respondents (Lecturers) on the availability, organization and utilization of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Nigeria. The established decision mean adopted is 2.50 which are compared against the cumulative mean responses for every table.

Table 4: Cumulative Mean Responses on the Availability of Multimedia Resources for Effective Teaching of Social Studies in Colleges of Education in North-Central Zone-Nigeria

S/No	Items	Response Categories				Mean
		FA	PA	UC	NA	
1	Visual Presenter/Document Cameras	36	15	38	32	2.45
2	Digital Photos Maps and Schematic Drawings	45	68	5	53	2.79
3	Videos/Videodiscs	40	29	32	20	2.74
4	Hypermedia Databases	13	42	26	40	2.23
5	Printed Photos Maps and Schematic Drawing	4	4	13	100	1.27
6	Audio and Video Digitizers	5	4	101	11	2.02
7	The World Wide Web	9	3	26	83	1.49
8	Digital Still or Video Camera	4	17	21	79	1.55
9	Digital Video and Still Image Cameras	4	8	40	69	1.56
10	Electronic Chalkboards or Smart boards	47	13	51	10	2.80
11	Hypermedia Texts	16	9	72	24	2.14
12	Digital Texts	49	21	40	11	2.89
13	Web-Based Texts	10	19	81	11	2.23
14	CDROM/DVD Dictionaries and Encyclopedia	11	6	29	75	1.61
15	Transparency	5	13	65	38	1.88
16	Digital Cameras	5	5	61	50	1.71
17	Scanners or Digitizers	45	8	38	30	2.56
18	Digital[Web and CD Based] Video	15	16	57	33	2.11
19	Interactive[Web and CD Based]Simulation	23	18	70	10	2.45
20	Digital Reading Environments	28	30	42	21	2.54
21	Projector	50	8	40	23	2.70
22	Television	13	5	30	73	1.65
23	Computer	4	4	30	84	1.41
24	Graphics	9	3	26	83	1.49
25	Digital Audio[Web and CD based]	12	49	23	37	2.30
Cumulative Mean		2.11				

Decision Mean=2.5

Table 4 presented the opinions of respondents (Lecturers) on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Nigeria. The table is shown to be negative as the decision mean of 2.5 is greater than the cumulative mean of 2.06. The opinion talking about digital texts holds the greatest mean of 2.89, with further details revealing that 49 of the respondents stated that it was fully available, 21 of them stated that it is partially available, 40 of them said that they are uncertain on the availability of digital texts and 11 of the respondents confirmed that it is not available. The availability of the electronic chalkboards or smart boards attained the second highest mean of 2.80 with further details revealing 47 of the respondents confirmed that it is fully available, 13 of them said that it is partially available, 51 of them are uncertain about the availability and 10 of the respondents said that they are not available.

Answers to Research Questions

Research Question One: What is the difference in the opinions of male and female Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone?

Table 5: Descriptive statistics on the cumulative opinions of male and female lecturers on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone-Nigeria

Variable	Gender	N	Mean	Std.Dev	Mean Diff
Availability	Male	95	74.3789	10.912	2.7635
	Female	26	71.6154	6.1714	

Results of the descriptive statistics in Table 5 showed the difference in the opinions of male and female respondents (Lecturers) on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Nigeria. The computed mean opinions on the availability of multimedia resources are 74.3789 and 71.6154 by male and female respondents respectively. There is mean difference of 2.7635 in favour of the male respondents.

Research Question Two: What is the difference in the opinions of state and federal colleges of education Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone?

Table 6: Descriptive statistics on the opinions of state and federal college lecturers on the availability of multimedia resources for teaching Social Studies in colleges of education in North-Central Zone-Nigeria

Variable	Category	N	Mean	Std.Dev	Mean Diff
Availability	State	66	73.1364	6.623	1.4272
	Federal	55	74.5636	13.1863	

Results of the descriptive statistics in table 6 showed the difference in the mean opinions of state and federal colleges of education respondents (Lecturers) on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Nigeria. The computed mean opinions regarding the availability of multimedia resources are 74.5636 and 73.1364 by Federal and state colleges of education respondents respectively. There is mean difference of 1.4272 in favour of the Federal college lecturers.

Test of Null Hypotheses

Hypothesis One: There is no significant difference in the opinions of male and female Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone;

Table 7: Independent t test samples statistics on the difference in the opinions of male and female respondents on the availability of multimedia resources for teaching Social Studies in colleges of education in North-Central Zone-Nigeria

Gender	N	Mean	Std.Dev	Df	t-cal	t-crit	P	Decision
Male	95	74.3789	10.912	119	1.236	1.96	0.219	H ₀ Retained
Female	26	71.6154	6.1714					

Calculated $p > 0.05$, calculated $t < 1.96$ at DF 119

Results of the Independent t test statistics in table 7 showed that there is no significant difference in the opinions of male and female respondents (Lecturers) on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone. This is because the calculated p value of 0.219 is found to be higher than the 0.05 alpha level of significance and the computed t value of 1.236 is found to be lower than the 1.96 t critical at Df 119. The computed mean opinions regarding the availability of multimedia resources are 74.3789 and 71.6154 for male and female respondents respectively. Consequently, the null hypothesis which states that there is no

significant difference in the opinions of male and female Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone is hereby retained.

Hypothesis Two: There is no significant difference in the opinions of state and federal college Lecturers on the Availability of Multimedia Resources for effective teaching of Social Studies in colleges of education in North-Central Zone;

Table 8: Independent t-test samples statistics on the difference in the opinions of state and federal college respondents on the availability of multimedia resources for teaching Social Studies in colleges of education in North-Central Zone-Nigeria

Gender	N	Mean	Std.dev	Df	t cal	t crit	P	Decision
Federal	55	74.5636	13.1863	119	0.771	1.96	0.442	H ₀ Retained
State	66	73.1364	6.623					

Calculated $p > 0.05$, calculated $t < 1.96$ at DF 119

Results of the independent t-test samples statistics in table 8 showed that there is no significant difference in the opinions of Federal and state college respondents on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone. This is because the calculated p value of 0.442 is found to be higher than the 0.05 alpha level of significance and the computed t-value of 0.771 is found to be lower than the 1.96 t critical at Df 119. Their computed mean opinions regarding the availability of multimedia resources are 74.5636 and 73.1364 for federal and state college respondents respectively. Therefore the null hypothesis which state that there is no significant difference in the opinions of federal and state college respondents on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone is hereby retained.

Summary of Major Findings

The findings of the study revealed that:

- There is no significant difference in the opinions of male and female respondents (Lecturers) on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone;
- There is no significant difference in the opinions of Federal and state college respondents on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone.

Discussion of Findings

There is no significant difference in the opinions of male and female respondents (Lecturers) on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone. This is in line with the finding made by this study, Salihu, Abubakar and Abubakar (2016) which indicated that there was no significant difference between male and female teachers on the level of awareness of online Information Resources for the implementation of Social Studies Education curriculum in Colleges of Education in Nigeria. Most of the teachers are aware of these resources but they are not accessible. Corroborating the findings of this study, Gulbahar & Guven (2008) discover that although teachers are willing to use ICT resources and are aware of the existing potential, they are facing problems in relation to accessibility to ICT resources.

In contrast, Okiki (2012) indicated that the level of awareness of the subscribed electronic information resources by the Library Management is rather low. Also, the study revealed that there was no significant difference in the opinions of Federal and state college respondents on the availability of multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone. Contradicting this finding, Salihu, Abubakar and Abubakar (2016) discovered significant difference in the opinions of states and federal college respondents on their awareness of online e-resources for implementing Social Studies curriculum in Colleges of Education in North-West Zone, Nigeria. Social Studies teachers of States owned Colleges of Education had higher level of awareness of online Information Resources than their counterparts in Federal Colleges of Education in Nigeria as revealed by the study. Corroborating the current findings Muhammad (2011) identified that there is a great deficiency in the availability and the use of instructional material. The study concluded that the less availability, misallocation and the deficiency in the use of instructional

material lead to the wastage of resources, the less effectiveness of instructional material and lower academic performance.

Conclusions

Based on the outcome of this study, the following conclusions are drawn:

The male and female respondents (Lecturers) have agreed that multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone are not adequate;

The Federal and state college respondents (lecturers) have agreed that multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone are not adequate;

Recommendations

From the outcome of this study, the following recommendations are made:

1. The male and female respondents (Lecturers) have agreed that multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone are not available. Therefore, the states and federal government should allocate adequate funds for the procurement of multimedia resources to facilitate effective communication and transaction between lecturers (male and female) and the students in Social Studies lessons;
2. The Federal and state college respondents (lecturers) have agreed that multimedia resources for effective teaching of Social Studies in colleges of education in North-Central Zone are not available. Therefore, adequate multimedia materials and resources should be made available to federal and state college lecturers in order to discharge their duties effectively;

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