EXTENT OF UTILIZATION OF ELECTRONIC MEDIA FOR TEACHING BY COMMAND SECONDARY SCHOOL TEACHERS IN LAGOS STATE

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ABSTRACT

ICT is not only considered as a tool, which can be added for existing teaching methods but also as an important instrument that support new ways of teaching and learning process. Despite the importance of electronic media to teaching and learning their usage in command secondary school Lagos is still very low as teacher are yet to embrace it utilization for teaching. The objectives of this study were to investigate: (i). the teachers' extent of utilization of electronic media; (ii) teachers' extent of utilization of electronic media based on gender; (iii) teachers' extent of utilization of electronic media based on experience; and (iv) teachers' extent of utilization of electronic media based on qualification. The study was a descriptive type using quantitative approach of the survey method, 300 teachers were randomly selected from the teachers in command secondary school in Lagos, at the end of the survey, 280 teachers adequately responded to the questionnaire that. Four research questions were raised; three hypotheses were tested. Mean scores were used to answer research questions, while t-test was used to test all the 3 hypotheses. The study revealed that computers, public address system are the most used electronic media in command secondary schools. There was no significant difference between male and female teachers' extent of utilization of electronic media for teaching. There was significant difference between qualified and less qualified teachers in the extent of utilization of electronic media for teaching with p=0.03.There was no significant difference between experienced and less-experienced teachers in the extent of utilization of electronic media for teaching with p=0.21.The study concluded that most of the electronic resources that were supposed to be in class were not adequately available, the few that were available were found to be underutilized. By implications it means most of the training was below the expected outcome. The study thus recommended that: There is a need for in-house training and periodic orientation on the use of available electronic devices for the teaching and learning in the schools. Students are to be exposed to available media in other relevant departments to complement the process. In addition, there is a need for an enabling policy on the use of electronic media, especially with pedagogical application in the teaching and learning process.

Keywords: Extent of Utilization, Qualification, Gender, Electronic Media, Teaching, Command Secondary School Teachers.

INTRODUCTION

The use of ICT brings about efficiency and effective learning environment which helps to transforms the teaching and learning process in where students deal with knowledge in an active, self-directed and constructive way (Wilson &Tan 2012). ICT is not only considered as a tool, which can be added for existing teaching methods but also nowadays ICT is seen as an important instrument that support new ways of teaching and learning process. ICT is being integrated into the teaching and learning process in various educational institutions in the world. Successful integration of ICT in teaching and learning process is highly dependent on teacher's preparation. The use of ICT in the classroom is very important because it help provide equal opportunities for students to learn and operate effectively in the present information age.

To meet the demands of the 21st century, people need understand and know more than core subjects. They need to know how to integrate the acquired knowledge and skills by thinking critically, and applying the knowledge to new situations by analyzing information, generating new ideas, communicating, collaborating, solving problems and making decisions. These skills help to provide flexibility and security in an era of constant change. People who can learn new information, new software programs or new ways of doing things have much better prospects in the world than people who cannot. The ability of students in critical thinking and analytical was rated below satisfactory or fair (Ross & Bruce, 2007). The developed countries are taking full advantage of television in education and this has greater scope in developing countries also (Pandey, 2012). Thus, the adoption of electronic media into the teaching and learning process could facilitate teaching and learning activities as students' interest could be aroused as the visuals may arrest students' attention.

Utilizing electronic media in the classroom is not about teaching students to operate computers, but utilizing electronic media is about helping teachers to use technology as a media for learning. The effective utilization of electronic media is the result of many factors but the most important factor is the teachers' competence and ability to utilize the media for students' needs. The above discussed projects on the use of television in education underline its role and significance for achieving the goals set for education for all (Kumar, 2015).

Electronic media utilization in the classroom is to provide the integral aspect of teaching and learning, also the type of education needed for the success of current day students. It is also one way to begin an educational reform of the way teachers teach and think. Teachers who understand the need to utilize electronic media typically have higher achieving students (Watson, 2007). The use of web technologies and wireless mobile Internet in Instructional media and supporting software tools have enabled distance educators to address the two primary barriers to distance education: the learner's feelings of remoteness and isolation, and the time it takes to complete an instructional transaction (Vyas, 2002).

The objectives of Command secondary school cannot be achieved if students are not properly trained on how to utilize or integrate electronic media in the teaching and learning processes. The command secondary school is a type of school in the army, which under the supervision of the Nigerian army education corps though the directorate of command secondary school to provide qualitative and affordable education for children and wards of service personnel's as well as civilians (Buratai, Abdullahi, & Hamarim, & 2017). The research stressed further that the Command secondary school education in Nigeria is to prepare individuals with the knowledge and skills for a useful living and provide students with high level of discipline which is the key to academic excellence.

BACKGROUND OF THE STUDY

Many studies have shown that the introduction of electronic media into secondary schools cannot by itself improve the quality of education or raise learners' attainment. Borris, Michael, Leigh and Peter (2011) believed that one important measure of any educational reform is the extent to which electronic media is adopted by teachers. They further maintained that regardless of the quantity and quality of electronic media placed in the classrooms, the key to how those media are used is the teacher. Also, in whatever program embarked by the government, the realization of the objective is always determined by the caliber of teachers available to utilize the available electronic media (Jekayinfa, 2007).

The need to understand factors that contribute towards teachers' utilization of electronic media into teaching is critical for successful implementation in a given context. Hence, this study seeks to examine command secondary school teachers' extent of utilizing electronic media for teaching in Lagos state.

Pandey (2012) determined the electronic Media Based E-Education Model for Media Persons and concluded that electronic media based e-education project is a valid and appropriate method for delivering quality e-education. There exists a relationship between: electronic media and students" progress in the e-education course, there exists a relationship between the adequacy of the electronic communication mode and the level of interactivity. There also exists a relationship between the level of electronic interactivity and the desire to take other e-education course secondary school teachers no matter the level of education where they work must have acquired some skills in Educational Technology as part of the pedagogical training. These skills will equip and afford the opportunity to perform their job effective and efficiently. The knowledge of their skill acquisition will also enable them to operate the various electronic media used in facilitation of teaching and learning.

Arulchelvan *and* Viswanathan (2016) investigated the role and Effectiveness of Electronic Media in Higher Education-With Special Reference to Tamilnadu. Their findings established that there is inadequate knowledge among students about the existence of educational radio. Opinions on program quality suggested a number of improvements to be made in order to enhance the reach of the media.. Also, Sweeney (2015) also conducted research on internationalization and the use of electronic media in teaching and assessment. Live webinars and audio feedback: apparent benefits and drawbacks and concluded via their study concludes that regular application of such technologies can make a vital contribution to institutional competitiveness, improve the learning and teaching experience and meet students' growing expectations of improved use of ICT. Such initiatives are therefore a key part of the internationalisation agenda. When electronic media is applied successfully in the educational and learning environment, there could be improvement in the teaching performance across all levels of education.

Today, e-education is trying to imitate the classroom. In few instances, where educators and electronic. media specialists experimented with forms native to e-education results have been spectacular. This generation of faculty can be designers of a unique effective and quality-driven form of electronic media-based teaching and learning. In many instances, it will resemble classroom instruction. It is against this background that the present study is carried out to investigate command secondary school teachers' extent of utilizing electronic media for teaching in Lagos state.

SIGNIFICANCE OF THE STUDY

This study would be of significance in different ways to encourage the utilization of electronic media in secondary school education in Nigeria. The findings of this study could benefit secondary school teachers, all military schools, students, school administrator, government, curriculum designers, policy makers and fellow researchers.

The result of the findings would be significant to teachers at the secondary school level. They would be fully aware of the electronic media available and know how to apply them into their teaching. Teachers would be encouraged based on the usefulness of the technology then strive to gain confidence and appropriate skill for the ease of use of the media in teaching.

The result of the findings of this study would benefit the government because when they get to know about the perception of teachers on the utilization and ease in teaching and learning process, they would be able to provide necessary electronic media technologies to schools for effective adoption.

The findings of this study would encourage the school administrators to see the usefulness of electronic media and make available all the materials and equipment needed for its full implementation in the school. These would therefore encourage students to learn and make teaching process to be more pleasurable. The findings of the study could also encourage curriculum designers and policy makers to formulate standard policy for the implementation of electronic media for teaching and learning of the new curriculum.

The findings of the study could also be of great benefit to researchers to improve on their future researches. It could add to few existing literatures available on the Command secondary school's teachers' attitude and perception towards utilization of electronic media in Lagos state. It would also add to knowledge by serving as reference materials to other researchers who may want to replicate the study.

OBJECTIVES

This study sought and provided answers to the following objectives

1. To what extent is the available electronic media utilized for teaching?
2. Is there any significant difference between male and female teachers' use of electronic media in command secondary schools?
3. What is the extent to which electronic media are used by qualified and non-qualified teachers in Command secondary schools in Lagos state?
4. How do experienced and less-experienced teachers in Command secondary schools in Lagos state use electronic media for teaching?

HYPOTHESES

The following hypotheses were formulated and tested at 0.05 level of significance based on research question 1 to 4:

H_{01}: To what extent is the available electronic media utilized for teaching.

H_{02}: There is no significant difference between male and female teachers' extent of use of electronic media in command secondary schools in Lagos state.

H_{03}: There is no significant difference in the use of electronic media by qualified and unqualified teachers in Command secondary schools in Lagos state.

H_{04}: There is no significant difference in the utilization of electronic media by experienced and less experienced teachers in Command secondary schools in Lagos state.

METHODOLOGY

The study was a descriptive research type using survey method. It involved the collection of data from the respondents without any manipulation in the course of study. The population for this study consisted of all the teachers in secondary schools in Lagos state. The target population consists of teachers of the four CSS in Lagos state. Which were Command Day Secondary School Ikeja, Command Day Secondary School Ojo, Command Day Secondary School Oshodi, and Command Secondary School Ipaja. The four (4) Command Secondary Schools were purposively selected due to the availability of different electronic media. The total number of teachers in Command Secondary School and Command Day

Secondary Schools in Lagos were 1046 and 300 respondents were randomly selected from all the command schools using the Isreal' model of determining size.

The instrument consists of sections (Sections A & B). Section A was centered on the bio-data of the respondents, Section B centered on the extent of utilization of the available electronic media in Lagos state. The 4-likert response mode of strongly agree, agree, disagree and strongly disagree were used for section B. Questionnaire was retrieved back immediately from the respondents for further analysis. To ensure that the research instrument measures what it is intended to measure, the instrument was validated by 4 lecturers in the Department of Educational Technology for suggestions, comments and views on the face and content validity. After proper scrutiny, the necessary corrections were made and the questionnaire was administered by the researcher to ensure the reliability.

The instrument was trial-tested on 20 Army day secondary school teachers in Sobi, Ilorin, Kwara State. This was aimed at establishing the validity of the research instrument. The school involved in the trial testing was outside the intended sample location for the study. 20 copies of questionnaire were administered for the trial testing, All the 20 copies of the questionnaire were returned and properly filled and thus, was used for the reliability analysis. Cronbach's Alpha statistical instrument was used to determine the reliability of the instrument at 0.05 level of significance. The result was 0.85 on the extent of utilization of Electronic media. The result showed high internal consistencies of the items in the research instruments. In view of this, the instruments were considered to be reliable.

The researchers obtained permission from the appropriate authorities in the sample secondary schools, and then personally administers the questionnaire to the teachers in the four selected secondary schools with the help of the research assistant. The instrument was retrieved immediately after they have been answered. The selected respondents were not forced or coerced to respond to the questionnaire; rather, the respondents were allowed to voluntarily participate in the study, and were also excused at any point a respondent wished not to continue as part of the study. All ethical considerations were abided as no teacher was coerced to attest to the research instrument.

The responses of the respondent in the custody of the researchers and the information given were treated with utmost confidentiality and anonymity during the administration, collection, analysis, and report of the research findings. In view of this the respondent name and personal details were not requested nor needed for the study. Therefore, all the information gathered during the course of this study was handled with care and was used strictly for the purpose of this study. All the completed copies of the questionnaire were retrieved immediately from the respondent for further analysis. Results obtained through the questionnaire were analyzed using descriptive and inferential statistics. Mean and percentage was used to answer research questions while t-test was used in testing the hypotheses. Data collected were coded and analyzed using Statistical Package for Social Sciences (SPSS) version 21.0 at 0.05 level of significance.

RESULTS

H_{01}: To what extent is the available electronic media utilized for teaching?

From table 1, revealed that, 19 respondents seldom used Overhead projectors while 261 (93.2%) do not use overhead projectors. Also, 12 respondents frequently use Radio set, 79 (28.2%) respondents seldom use Radio sets, while 189 (67.5%) do not use Radio sets. 12 (4.3%) respondents frequently use Television sets, while 268 (95.7%) do not use it at all. But none of the respondents use Tape recorder players and still cameras due to its unavailability. Also, none of the respondents frequently use Video players, 43 (15.4%) respondents seldom use Radio set Video players s, while 237 (84.6%) do not use Video players. None of the respondents frequently use Motion Cameras, 43 (15.4%) respondents seldom use Radio set motion Cameras, while 237 (84.6%) do not use Motion Cameras. Others followed suit as shown in table 1.

Table 1: Frequency of use of electronic media for teaching in command secondary schools

S. No.	Electronic media	Frequently used		Seldom used		Not used	
		F	%	F	%	F	%
1	Overhead projectors	Nil	Nil	19	6.8	261	93.2
2	Radio sets	12	4.3	79	28.2	189	67.5
3	Television sets	12	4.3	Nil	Nil	268	95.7
4	Tape recorder players	Nil	Nil	Nil	Nil	280	100.0
5	Video players	Nil	Nil	43	15.4	237	84.6
6	Still Cameras	Nil	Nil	Nil	Nil	280	100.0
7	Motion Cameras	Nil	Nil	43	15.4	237	84.6
8	Computers	199	71.1	57	20.4	24	8.6
9	Internet connectivity	45	16.1	26	9.3	209	74.6
10	Audio Tape Recorders	Nil	Nil	43	15.4	237	84.6
11	Video Tape Recorders	Nil	Nil	Nil	Nil	280	100.0
12	Flash Drive	45	16.1	26	9.3	209	74.6
13	Telephone	13	4.6	78	27.9	189	67.5
14	Public address system	251	89.6	27	9.6	2	0.71
15	Multimedia projector	21	7.5	43	15.4	216	77.1
16	Radio Broadcast	Nil	Nil	Nil	Nil	280	100.0
17	Television Broadcast	Nil	Nil	Nil	Nil	280	100.0
18	Memory Card	251	89.6	27	9.6	2	0.71
19	Presentation software e.g. PowerPoint	36	12.9	74	26,4	170	60.7
20	Compact Discs	21	7.5	43	15.4	216	77.1

It was established that computers, public address system are the most used electronic media in command secondary schools. While other items like radio set, television set, tape recorder players, video players, internet connectivity, multimedia projector and presentation software are rarely used or not been used at all. This implies that a teacher in command secondary schools does not make use of the electronic media available to them except the use of computer and public address system.

H_{02}: There is no significant difference between male and female teachers' extent of use of electronic media in command secondary schools in Lagos state.

Table 2: t-test analyses of the teacher's extent of use electronic media based on gender

Gender	N	Mean	SD	Df	t	Sig (2-tailed)	Remarks
Male	123	28.33	4.51	259	-3.23	0.55	Accepted
Female	157	29.50	1.98				

From table 2, it can be deduced that there was no significant difference between male and female teachers' extent of use of electronic media. This is reflected in the results of the hypotheses tested; df (259) t= -3.3, 0.55> 0.05. Thus, the hypotheses are accepted. This means that the hypotheses which states that "there is no significant between the male and female teachers' extent of use of electronic media is accepted. The implication therefore is that, the teachers' extent of use of electronic media does not differ based on gender.

H₀₃: There is no significant difference in the use of electronic media by qualified and unqualified teachers in Command secondary schools in Lagos state.

Table 3: t-test analyses of the teachers use of electronic media based on qualifications

Qualification	N	Mean	SD	Df	t	Sig (2-tailed)	Remarks
Qualified	124	20.00	1.90	278	2.41	0.03	Not Accepted
Unqualified	156	19.44	1.86				

From table 3, it can be deduced that there was significant difference between qualified and the less-qualified teachers' in the use of electronic media. This is reflected in the results of the hypotheses tested; df (278) t= 2.41, 0.03<0.05. Thus, the hypothesis is rejected. This means that the hypotheses which states that "there is no significant difference in the use of electronic media between the qualified and the unqualified teachers was rejected. The implication therefore is that; the teachers use of electronic media differs based on educational qualifications.

Table 4: t-test analyses of the teachers use of electronic media based on experience

Experience	Frequency	Mean	SD	Df	t	Sig (2-tailed)	Remarks
Experienced	124	19.86	2.02	259	1.25	0.21	Accepted
Less-experienced	156	19.57	1.78				

H₀₄: There is no significant difference in the utilization of electronic media by experienced and less experienced teachers in Command secondary schools in Lagos state

From Table 4, it can be deduced that there was no significant difference between the experienced and the less-experienced teacher's use of electronic media in command secondary schools in Lagos state. This is reflected in the results of the hypotheses tested; df (278) t= 1.25, 0.21 > 0.05. Thus, the hypothesis is accepted. This means that the hypotheses which states that "there is no significant difference between experienced and the less experienced teachers' use of electronic media is accepted. The implication therefore is that the teachers use of electronic media does not differ based on experience.

DISCUSSIONS

The findings on the extent of utilization of electronic media in the command secondary schools revealed that, there was no effective utilization of electronic media by Teachers and student in the teaching and learning process in the schools. Only computer and television were found be favorably utilized. It was therefore concluded that, the necessary electronic media for teaching and learning of social studies in the colleges were not effectively utilized. The finding agrees with Duru and Ozoji (2011) who reported that computer teachers in secondary schools do not utilize computer hard ware and internet applications in lessons; that teachers lack the required skills to operate these resources; secondary schools lack the necessary infrastructures required for utilization of the resources and applications. Similarly, Olufunde, Oyetola and Kehinde (2010), in a study on Access and Utilization of ICT Among Lecturers and Students in South West Nigerian Public Universities, found that 89% of the respondents claimed that they had rarely or never had access to ICT facilities.

Ololube (2006), also studied on teacher ICT utilization competencies in sub-Saharan Africa, found out that teachers were not well trained in using ICTs in teaching. In further support of the present research findings, Ehikhamenor (2003), in a study on Utilization of Internet information by Nigerian Scientist in 10 Universities observed that, scientists in Nigeria still heavily rely on printed information services. A contrary view was however provided by a study conducted by Ebeniza and Oluchi (2011) on Availability of ICT in teaching and learning of English language in Okigwe educational zone, Imo State, Nigeria, which revealed that the available ICT facilities were to a great extent used by the teachers in the schools.

CONCLUSION

Finding from the current study was that, most of the electronic resources that were supposed to be in class were not adequately available, the few that were available were found to be underutilized. By implications it means most of the training was below the expected outcome. Teachers were not also trained adequately in using electronic media for teaching; most teachers were therefore unable to utilize the materials for teaching. The long run effect will be training teachers that were under equipped to teach pupils that can face the global world of modern science and technology application in the teaching and learning process, and will be incompetent in their areas of interest compared to others.

RECOMMENDATIONS

From the analysis of the data collected for this study and result of the tested hypotheses, the following recommendations are made:
There is a need for in-house training and periodic orientation on the use of available electronic devices for the teaching and learning in the schools. Students are to be exposed to available media in other relevant departments to complement the process.
There is a need for an enabling policy on the use of electronic media, especially with pedagogical application in the teaching and learning process.

ACKNOWLEDGEMENT

permission granted to conduct the study in their institutions. We humbly acknowledge the respondents which were teachers teaching in command secondary schools for their support, patience and endurance. In addition, all authors whose work were cited in this study had done a great work in their researchers which laid a basis for this study. Lastly, the effort of the experts who validated the research instrument is commendable.

AUTHORS CONTRIBUTIONS

The first author is responsible for the introduction and reviews of related literature, the second author is responsible for the data gathering while the third author is in charge of methodology and discussions and the fourth author is responsible for article proof reading, and conclusions.

CONFLICT OF INTEREST

There is no conflict of interest regarding this study.

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