

Command secondary school teachers' perceived usefulness of electronic media for teaching-learning in Lagos State

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ABSTRACT: The general objective of this study was to investigate the perceived usefulness of command secondary school teachers towards utilization of electronic media for teaching in Lagos State. The study was a descriptive type using quantitative approach of the survey method. Three hundred (300) teachers were randomly selected from the teachers in command secondary school (CSS) in Lagos. At the end of the survey, 280 teachers adequately responded to the questionnaire and were used for the study. A research question was raised and three hypotheses were tested for this study. Mean scores were used to answer the research question, while t-test was used to test all the 3 hypotheses. The study revealed that: (1) teachers had positive perception on the usefulness of electronic media with a grand mean value of 3.37, (2) there was no significant difference between male and female teachers' perception on the usefulness of electronic media for teaching; (3) no significant difference between qualified and less qualified teachers in the perception on the usefulness of electronic media for teaching; and (4) no significant difference between experienced and less-experienced teachers in the perception on the usefulness of electronic media for teaching. The study concluded that teachers in CSS have the same perception about the usefulness of ICT in education. 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. Learners are to be exposed to available media in other relevant departments to complement the process.

Keywords: Electronic media, experience, information and communication, Lagos State, learners, teachers, teaching.

INTRODUCTION

This study focused on the Army secondary schools which are referred to the command secondary schools in Nigeria. Thus, the command secondary school is a type of school in the army, which under the supervision of the Nigerian army education corps through 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 et al., 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

learners with high level of discipline which is the key to academic excellence.

Tinio (2003) defined that Information and Communication Technology (ICT) is a generic term referring to technologies for collecting, storing, editing and passing on information in various forms. Information Communication Technology is a means of receiving, processing, storing, retrieving and disseminating of information through the use of computer and other telecommunication facilities. ICT is a diverse set of technology where by the tools and resources are used to

communicate, creates, disseminates, store and manage information. These technologies include computer, power point, internet, broadcasting technologies (radio and television) and telephony. The review of Information and Communication technologies by Nigeria teachers creates a powerful learning environment for both the teachers and the learners (Adebayo, 2021).

An effective use of Information and Communication Technologies in Nigeria schools can have immediate positive impacts on the school learning environments by creating more dynamic interaction between learners and teachers, creating collaboration and teamwork in problem solving activities, stimulating creativity in both learners and teachers, and helping learners to control and monitor their own learning (Tinio, 2003). Similarly, the use of ICT in teaching and learning is a relevant and functional way of providing education to learners that will assist in imbuing in them the required capacity for the worth of work. Moreover, the need for the review of technological tools by Nigeria teachers is very crucial because teachers' attitudes are very important to the success or failure of integrating ICT into instruction.

The effective utilization of electronic media is the result of many factors but the most important factor is the teachers' competence and ability to use the media for learners' needs (Montoya, 2021). Therefore, before implementing a certain media, it is important to ascertain the perception of users towards it. Perception influences their willingness and readiness of integrating media in the teaching and learning processes. For this reason, teachers' positive perception towards the utilization of electronic media is highly crucial because this will go a long way in proffering remedy in the teaching and learning processes.

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 learners. It is also one way to begin an educational reform of the way teachers teach and think. Teachers who understand the need to use electronic media typically have higher achieving learners (Ala, 2021). Electronic media help to create new way of perceiving the world around us and shade the way we interact with our environment and each other. Our perpetual abilities changes as our visual environment are changed by advances in the usage of electronic media. In view of these roles and expectation from teachers, their perception towards the utilization of media is necessary.

Perception is the organization, identification, and interpretation of sensory information in order to represent and understand the environment (Schacter, 2011). Perception is not the passive receipt of signals but is shaped by learning, memory, expectation and attention (Gregory, 2010). Alan and Gray (2011) however described the three components of perception as perceiver, target and situation. The perceiver is the person who becomes aware about something and come to a final understanding.

So also, there are three factors that can influence his or her perceptions; experience, motivational state and emotional states, the perceiver will react to or perceive something in different ways. Also in different situations, he or she might employ a "perceptual defense" where they tend to "see what they want to see". The target is the person who is being perceived or judged. While other situation may also generate greater influences perceptions because of the different situations that may arise, this may also need additional information about the target. Through perceptual process, may also gain information about the properties and elements of the environment that are critical to survival. Perception not only creates our experience of the world around us but allow us to act within our environment.

The United Nation defined gender equality as the process of measuring equal representation of men and women. Gender equality does not imply that women and men are the same but they have equal value and should be accorded with equal treatments. They also refer to gender equality as human right. In the teaching and learning process, male and female teachers must be treated equally towards the use of electronic media in order to educate or instruct their learners in the process of teaching and learning. Osondu (2021) and Bergman and Svensson (2021) deduced that female learners are more proficient in the use of electronics for learning more than their male counterparts.

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

The study of Yusuf (2005) has also established the need for electronic media in secondary schools. Yusuf (2005) worked on the effect of audio graphic illustration on junior secondary school learners' performance in Basic Technology. His findings revealed that learners taught with audio graphic illustrations perform better than those taught with the conventional method. 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.

It is against this background that the present study is carried out to investigate the perceived usefulness of command secondary school teachers towards utilization of electronic media for teaching in Lagos State. The specific objectives were to investigate:

1. teachers' perceived usefulness of electronic media based on gender;

2. teachers' perceived usefulness of electronic media based on experience; and
3. teachers' perceived usefulness of electronic media based on qualification.

Research question

This study sought and provided answers to the following question: What is the perceived usefulness of teachers towards electronic media in command secondary schools in Lagos State?

Research hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

H₀₁: There is no significant difference between male and female teachers perceived usefulness of electronic media in command secondary schools in Lagos State.

H₀₂: There is no significant difference between qualified and less qualified teachers perceived usefulness of electronic media in command secondary schools in Lagos State.

H₀₃: There is no significant difference between experienced and less experienced teachers' perceived usefulness of electronic media 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 command secondary school (CSS) in Lagos state. Which are 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 (2013) of determining size.

The instrument consists of sections (Sections A & B). Section A was centered on the bio-data of the respondents, while section B consists of 15 items on the perception on the usefulness of electronic media in Lagos State. The 4-likert response mode of strongly agree, agree, disagree and strongly disagree were used on 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. 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 0.83 on perception towards the use 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. The responses of the respondent in the custody of the researcher 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 respondents' 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 the question 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

Research question: *What is the perceived usefulness of teachers towards electronic media in command secondary schools in Lagos State?* From Table 1, it can be deduced that, statement one which sought information on whether

Table 1. Perceived usefulness of electronic media in command secondary schools.

SN	Statement	Mean
1	Using electronic media support the critical part of my task as a teacher	3.42
2	Utilizing electronic media will enhances communication with my learners	3.46
3	Overall, I find utilizing electronic media very useful for my teaching	3.41
4	Utilizing electronic media will allow me to teach more in class.	3.29
5	Utilizing electronic media will give me access to current and accurate information concerning my teaching	3.27
	Total	3.37

Table 2. t-test Analyses of the teachers perceived usefulness of electronic media based on gender.

Gender	Frequency	Mean	SD	Df	T	Sig (2-tailed)	Remarks
Male	123	31.4	4.12	278	1.36	0.71	Accepted
Female	157	32.5	5.21				

Table 3. t-test analyses of the teachers perceived usefulness of electronic media based on qualifications.

Qualification	N	Mean	SD	Df	t	Sig (2-tailed)	Remarks
Qualified	124	20.22	1.91	278	2.31	0.15	Accepted
Unqualified	156	20.44	1.77				

using electronic media support the critical part of the task as a teacher has a mean of 3.42. Statement two which sought information on whether using electronic media will enhance communication with the learners has a mean 3.46. Statement three which sought information on whether the teachers find the use of electronic media very useful for teaching has a mean of 3.41. Statement four which ask if using electronic media allow them to teach more in class has a mean of 3.29. Lastly, statement five which ask the teacher opinion on whether using electronic media will give access to current and accurate information concerning teaching has a mean value of 3.27. Therefore, it can be deduced from the grand mean of 3.37 that the teachers perceived electronic media useful in teaching and learning process.

Hypothesis H₀₁: *There is no significant difference between male and female teachers perceived usefulness of electronic media in command secondary schools in Lagos state.* From Table 2, it can be deduced that there was no significant difference between male and female teachers perceived usefulness of electronic media. This is reflected in the results of the hypotheses tested; df (278) $t = 1.36$, $0.71 > 0.05$. Thus, the hypotheses were accepted. This means that the hypotheses which states that “there is no significant difference between male and female teachers perceived usefulness of electronic media” is accepted. The implication therefore is that, teacher’s perceived usefulness does not differ based on gender.

Hypothesis H₀₂: *There is no significant difference between qualified and less qualified teachers perceived usefulness of electronic media in command secondary schools in Lagos state.* From Table 3, it can be deduced that there was no significant difference between qualified and the less-qualified teachers’ perceived usefulness of electronic media. This is reflected in the results of the hypotheses tested; df (278) $t = 2.31$, $0.15 < 0.05$. Thus, the hypothesis is not rejected. This means that the hypotheses which states that “there is no significant difference in the perceived usefulness of electronic media between the qualified and the unqualified teachers was not rejected. The implication therefore is that; the teachers perceived usefulness of electronic media does not differs based on educational qualifications.

Hypothesis H₀₃: *There is no significant difference between experienced and less experienced teachers’ perceived usefulness of electronic media 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 teachers’ perceived usefulness 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’ perceived usefulness of electronic media is

Table 4. t-test analyses of the teachers perceived usefulness 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				

accepted. The implication therefore is that the teachers perceived usefulness of electronic media does not differ based on experience.

DISCUSSIONS

It could be shown from the result of this findings that, gender does not influence the perceived usefulness of electronic media for learning and that male and female does not differ on the perceived ease of use of electronic media for learning. Even though, Caleb (2020) stated that “there are some evidences to suggest that both males and females engage in different styles of thinking; boys typically tinker with their available tools to form new constructs. Moreover, females frequently engage in “relational play” in which “the focus is on the relationship among people or the relationship between people and objects” rather than on modifying the object itself (Wilson and Tan, 2012; Harvard, 2021).

The findings of the study revealed that, no significant differences between male and female teachers’ perception on the utilization of electronic media for teaching in command secondary schools. This would suggest that male and female teachers in have the same perception about the use of ICT in education. This was not in agreement with the result of reports of Boris et al. (2011) and Aja (2013) who reported there is gender differences in ICT usage. The result agreed with the finding of Makinde et al. (2013) and Fakomogbon (2018) in their research, gender differences in internet usage intentions for learning in higher education.

This study concluded that teachers have positive perception towards the use of electronic media for instructional activities. Therefore, from the analysis of the data collected for this study and result of the tested hypotheses, the following recommendations are made:

1. 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. Learners are to be exposed to available media in other relevant departments to complement the process.
2. Directorate of command secondary schools should imbibe the use of motivational strategies for staff in the application of electronic media in the teaching and learning process.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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