



Command Secondary School Teachers' Intention to Use Electronic Media for Teaching in Lagos State

Charles Olubode Olumorin,^{1✉} Amos Ochayi Onojah², Ibrahim Shaibu Bello³,
Adenike Aderogba Onojah⁴

^{1,2,3,4} Faculty of Education, University of Ilorin, Ilorin, Nigeria

DOI: <https://doi.org/10.15294/ijcets.v9i1.43490>

Article History

Received : October 2020

Accepted : January 2021

Published : April 2021

Keywords

Command Secondary School
Teachers; Electronic Media;
Experience; Gender; Intention

Abstrak

Penelitian ini menelisik kecenderungan guru dalam menggunakan media elektronik; termasuk dilihat dari jenis kelamin, pengalaman dan kualifikasi mereka. Penelitian ini merupakan penelitian deskriptif, 280 guru yang dipilih secara acak untuk mengisi kuesioner. Nilai rata-rata dan uji-t digunakan untuk analisis data. Hasil penelitian ini mengungkapkan bahwa guru memiliki kecenderungan positif untuk menggunakan media elektronik. Ada perbedaan yang signifikan antara niat guru laki-laki dan perempuan untuk menggunakan media elektronik untuk mengajar dengan $p=0,02$. Di sisi lain, tidak ada perbedaan yang signifikan antara kecenderungan guru yang berkualitas dan kurang berpengalaman serta kurang berpengalaman dalam menggunakan media elektronik untuk mengajar. Penelitian ini menyimpulkan bahwa masyarakat pada dasarnya telah familier dan sangat bergantung pada aktivitasnya dengan perangkat elektronik untuk keperluan ekonomi. Oleh karena itu, penelitian ini merekomendasikan bahwa direktorat komando sekolah menengah harus mengakomodasi penggunaan strategi motivasi bagi staf dalam penerapan media elektronik dalam pengajaran.

Abstract

This study investigated teachers' intention to use electronic media; and teachers' intention to use electronic media based on gender, experience and qualification. The study was a descriptive type, 280 randomly selected teachers adequately responded to the questionnaire. Mean scores and t-test were used to for the data analysis. The study revealed that teachers had positive intention to use electronic media. There was significant difference between male and female teachers' intention to use electronic media for teaching with $p=0.02$; and There was no significant difference between qualified and less qualified as well experienced and less-experienced teachers' intention to use electronic media for teaching. The study concluded that the society has embraced electronic devices and relies much on it for socio economic pursuit, The study thus recommended that directorate of command secondary schools should imbibe the use of motivational strategies for staff in the application of electronic media in the teaching.

✉ Corresponding author :

Address: Faculty of Education, University of Ilorin, Ilorin,
Nigeria

E-mail: Bodeolumorinnn@unilorin.edu.ng

INTRODUCTION

The integration of information and communication technologies can help to give a new way of life teachers and students. It can help to improve and develop the standard of education by ensuring effective curricular support in difficult subject areas. Adeyemi and Olaleye (2010) submitted that within a very short period of time, ICTs have become the basic building blocks of our present society. Many countries now regard the basis of ICT and mastering the basic skills and concepts as part of the integral part of education, alongside with numeric, reading and writing. Wilson and Tan (2020) established that teachers' general efficacy in the use of ICT for teaching had influence on their teaching exercise. However, there have been misconceptions that ICTs generally refers to "computers and computing related activities".

This is fortunately not the case, although computers and their application play a very vital role in the modern information management, other technologies and systems also comprise of the phenomenon that is mostly regarded as ICT. Agbatogun (2010) stated that near the end of the 1980s, the term 'computers' was replaced by 'IT' (information technology) signifying a shift of focus from computing technology to the capacity to store and retrieve information. This was followed by the introduction of the term 'ICT' (information and communication technology) around 1992, when e-mail started to become available to the general public.

Adetimirin (2012) submitted that ICTs cover Internet service provision, telecommunications equipment and services, information technology equipment and services, libraries and documentation centers, media and broadcasting, commercial information providers, network-based information services. Information and Communication Technology shortened as ICT. Ugwu and Obegbulem (2019) stated that ICT enhance capacity building for staff personnel in post primary schools for effective school administration. The word "Information" according to Agbatogun (2010) is a message intended for communication. It refers to knowledge and ideas which are provided in order to increase awareness in people. Information has to do with the sum of knowledge to be transmitted from agent of change to the target groups. Communication is one of the processes of transferring information from one person to another as well as from the sender to the receiver. Adeyinka (2005)

defined Communication as the process of transferring ideas, skills or attitudes from one person to another accurately and satisfactorily.

Buratai, Abdullahi, and Hamarim (2017) added that sound education is the driver of advancement at personal, state, regional and national levels thus provision of sound and quality education is critical to solving most of the county's problems and that inadequate and inappropriate education in any country could lead to stagnation, retrogression and social ills, such as crime and occasionally violent extremism so therefore there is a great need to improve the standard of education in the Nigeria army schools. Ross and Bruce (2017) deduced that professional development have strong effect on teacher efficacy with a randomized field trial.

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.

Oludipe (2018) opined that science teachers' literacy level in and attitude dimensions on computer usage was average. Thus, the more teachers integrate these technologies into their instructional process the better their teaching job performance. The need to understand factors that contribute towards teachers' intention to use electronic media into teaching is critical for successful implementation in a given context. Hence, this study seeks to examine command secondary school teachers' intention to use electronic media for teaching in Lagos state.

The recent Covid19 pandemic affects all areas of human life including education as people can no longer learn within their four walls of the classroom thereby necessitating the need for various alternatives. The electronic media is imperative here. The use of ICT brings about innovation in teaching and learning process as its

also help to improve lifelong learning habits in students (Makinde, Makinde & Shorunke, 2013). The call for application of electronic media in secondary education is pervasive and integrates productivity and efficacy in curriculum implementation. Meanwhile, in developing countries like Nigeria, electronic media is derailed with the problem of instructional devices such as computer laboratories, internet and e-mail facilities, digital library, digital classrooms, other studies indicated that there is shortage of qualified teacher for e-learning, lack of facilities, infrastructures and equipment (Jegede & Owolabi, 2008).

The problem is that electronic media in secondary education is challenged by the new technologies in terms of availability, accessibility, teacher's area of specialization, teaching qualification, utilization, among others. Schools need to be equipped with necessary electronic media which could facilitate learning. One of such relevance is the aftermath of COVID-19 which jeopardized the school academic calendar as students and teachers could no longer come together as usual in populace. It is against this background that the present study examined command secondary school teachers' intention to use electronic media for teaching in Lagos state.

Based on the previous consideration this study sought and provided answers to the following questions which are the aim of the study. *First*, what are the teachers' intentions to use of electronic media in command secondary schools in Lagos state? *Second*, is there any significant difference between male and female teachers' intention to use electronic media in command secondary schools? *Third*, is there any significant difference between experienced and less-experienced teachers' intention to use electronic media in command secondary schools? *Fourth*, is there any significant difference between qualified and non-qualified teachers' intention to use electronic media in command secondary schools? Therefore, this article would contribute to the field of educational technology, especially on the use of the technology at secondary schools.

METHOD

The following hypotheses were formulated and tested at 0.05 level of significance based on research question 2 to 4:

H_{01} : There is no significant difference between male and female teachers' in-

tentions to use electronic media in command secondary schools in Lagos state

H_{02} : There is no significant difference between experienced and less-experienced teachers' intention to use electronic media in command secondary schools

H_{03} : There is no significant difference between qualified and non-qualified teachers' intention to use electronic media in command secondary schools

The study was a descriptive research type using survey method. It involved the collection of data from the respondents without any manipulation during study. The data were collected across the schools from November till December 2019. The time of collecting the data is from 8.am till 2.pm of weekdays in the schools. 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 (2013) of determining size. The instrument consists of sections (Sections A & B). Section A was centered on the biodata of the respondents, Section B consists of 15 items on the intention to utilize 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. The school involved in the trial testing was outside the intended sample location for the study. 20 copies of question-

naire 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 results were 0.95 on the availability of electronic media; 0.83 on perception towards the use of electronic media; while 0.75 on attitude to the use of available electronic media. All the results showed high internal consistencies of the items in the research instruments. In view of this, the instruments were considered to be reliable.

The researcher 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 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's 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 25.0 at 0.05 level of significance.

RESULT AND DISCUSSION

This section presents the analysis and interpretation of the results for this study. Mean and standard deviation were used to answer re-

search questions, while the hypotheses were tested using the t-test. The results are presented as follows

A. The Varieties of Teachers' Intentions

According to the first research question we found five main intentions of the teachers when they use electronic media as can be seen in table 1 below.

Table 1 showed statement one which ask whether the teachers intend to download course materials using electronic media has a mean of 3.69. Statement two which sought information on whether the teachers intend to use electronic media to pass out information to the students has a mean of 3.47 while statement three which sought information on whether the teachers will be willing to take a professional programme to gain competency in the use of electronic media in education. Statement four sought information on whether the teachers plan on using electronic media for learning for future job on a regular basis in the future. Lastly, statement five which sought information on whether the teachers intend to use the electronic media to teach the students in a large class has a mean of 3.23. Therefore, the results of the grand mean 3.46 implies that, the teachers had a positive intention to use electronic media for teaching and learning process.

B. Justification for Developing Contents on Climate Smart Agriculture

In order to answer the second question, we use hypothesis one and found that there was a significant difference between male and female teachers' intentions to use electronic media in command secondary schools in Lagos state. In order to ascertain the significant difference between the male and female teachers' intentions to use electronic media in command secondary schools in Lagos state, independent t-test was employed.

According to table 2, it can be deduced that there was significant difference between male and female teachers perceived intention of electronic media. This is reflected in the results of the hypotheses tested; $df (278) t = 0.41, 0.02 > 0.05$. Thus, the hypothesis was rejected. This means that the hypotheses which states that "there is no significant difference between male and female teachers perceived intention to use electronic media" is rejected. The implication

Table 1 Perceived intention to use electronic media in command secondary schools

	Statement	Mean
1	I intend downloading course materials using the electronic media	3.69
2	I intend using electronic media to pass out information to the students	3.47
3	I will be willing to undertake a professional programme to gain competency in the use of	3.43
4	social media in education	3.49
5	I plan on using electronic media for learning for future job on a regular basis in the future	3.23
	I intend to use the electronic media to teach the students in a large classroom	
Total		3.46

Table 2 T-test analysis of the teacher's intention to use electronic media based on gender

Gender	Frequency	Mean	SD	Df	T	Sig (2-tailed)	Remarks
Male	123	16.47	4.12	278	0.41	0.02	Not Accepted
Female	157	17.52	5.21				

Table 3 T-test analyses of the teacher's intention to use electronic media based on experience

Experience	Frequency	Mean	SD	Df	T	Sig (2-tailed)	Remarks
Experienced	124	18.80	2.03	278	0.17	0.22	Accepted
Less experienced	156	18.57	1.98				

Table 4 T-test analyses of the teacher's intention to use electronic media based on qualifications

Experience	N	Mean	SD	Df	T	Sig (2-tailed)	Remarks
Qualified	124	19.01	1.87	278	0.11	0.17	Accepted
Unqualified	156	19.44	1.66				

therefore is that teacher's perceived intention to use electronic media differs based on gender.

C. Teachers' Intentions Based on Their Experiences

In contrast to the previous finding, the second research question also accept the second hypothesis, so that there is no significant difference between experienced and less-experienced teachers' intention to use electronic media in command secondary schools. Independent samples t-test was conducted to determine if there is any significant difference between between experienced and less-experienced teachers' intention to use electronic media in command secondary schools. The result is shown in table 3.

From Table 3, it can be deduced that there was no significant difference between the experienced and the less-experienced teacher's intention to use electronic media in command secondary schools in Lagos state. This is reflected in the results of the hypotheses tested; df (278) $t = 0.22$, $0.22 > 0.05$. Thus, the hypothesis is ac-

cepted. This means that the hypotheses which states that "there is no significant difference between experienced and the less experienced teachers' intention to use electronic media is accepted. The implication therefore is that the teachers' intention to use electronic media does not differ based on experience.

D. Teachers' Intentions Based on Their Qualifications

In other to ascertain the significance difference between qualified and non-qualified teachers' intention to use electronic media in command secondary schools, independent t-test statistical tool was employed.

From Table 4, it can be deduced that there was significant difference between qualified and the less-qualified teachers' intention to use of electronic media. This is reflected in the results of the hypotheses tested; df (278) $t = 0.17$, $0.17 > 0.05$. Thus, the hypothesis is not rejected. This means that the hypotheses which states that "there is no significant difference in the intention to use electronic media between the qualified and the unqualified teachers was not

rejected. The implication therefore is that: the teachers' intention to use electronic media does not differ based on educational qualifications.

Regarding the teachers' intention to use electronic media for teaching we found that teachers have good intention towards the use of electronic media for teaching. This supports the studies of Oludipe (2018) who deduced that teachers have strong attitude towards the adoption of ICT for classroom activities. It was further established that there were significant differences between male and female teachers' intention to use electronic media site for teaching. The difference in the intention was in favor of the female. Electronic media should be used effectively in the classroom so that students can use it for future purpose. Jones (2019) and Lee (2020) review that both genders substitute communication with media use and multitask social media activity with academics.

There was no significant difference between experienced and less-experienced teachers' intention to use electronic media in command secondary schools. The findings of Ross and Bruce (2017) established that experienced teachers tend to use ICT for teaching more than their less-experienced teachers' counterpart. In the same vein, Morrisa (2016) on their research on teachers' technophobes deduced that the experienced teachers are more professionally competent in the use of ICT to support teaching and learning and that the less experienced teachers' incompetence could be resulting from technophobia. There was no significant difference between qualified and non-qualified teachers' intention to use electronic media in command secondary schools. Imant and De Brabander (2018) established that teachers' and Principals' sense of efficacy in elementary schools have strong effect on their elementary students' learning activities.

The consequent of this findings is that teachers who have good intention towards the use of electronic media will use it often if available and provided in the schools. This is a strong implication on the teaching and learning process as students' academic performance could be improved when teachers utilized the electronic media for the instructional activities. The implications therefore are enormous, application of electronic media has become a global phenomenon, and no nation can afford to be left behind because the consequences are enormous. The society has embraced electronic devices and re-

lies much on it for socio economic pursuit, Governments have embraced it and encouraged the use in schools, international organizations and philanthropists also encouraged and support it.

CONCLUSION

The study concluded that teachers have positive intention towards the use of electronic media for teaching in Lagos state. This intention has been influenced by gender but not by qualification and experience. 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 an enabling policy on the use of electronic media, especially with pedagogical application in the teaching and learning process. 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.

REFERENCES

- Adetimirin, E. A. (2012). ICT Literacy Among Undergraduates in Nigeria Universities. *Journal of Education Information Technology*, 17, 381-397.
- Adeyemi, T. O. & Olaleye, F. O. (2010). Information communication and technology (ICT) for effective management of secondary school for sustainable development in Ekiti State, Nigeria. *American-Eurasian Journal of Science Research*, 5(2), 106-113.
- Adeyinka, D. U. (2005). Teachers' demographic factors as predictors of improvisation and utilization of instructional materials. *A Journal of CUDIMAC Curriculum and Media Technology. University of Nigeria Nsukka*, 71(1), 57-62
- Agbatogun, A. O. (2010). Gender, academic qualification and subject discipline differentials of Nigeria Teachers' ICT literacy. *Journal of Academic Leadership*. <http://www.academicleadership.org/empiricalresearch>
- Buratai, T. Y., Hamarim, J., & Abdulahi L.F. (2017). *Repositioning Command Schools*. A workshop for teachers and other stakeholders in Nigerian Army command schools held at the Nigerian Army Research centre. 19th-21st July, 2017.
- Imant, J. G. & De Brabander, C. J. (2018). Teachers' and Principals' sense of efficacy in elementary schools. *Teaching and Teacher Education*, 18(2), 179-195.
- Israel, G. D. (2013) Determining Sample Size. Institute of Food and Agricultural Sciences (IFAS), University of Florida, PEOD-6, 1-5. [https://www.scirp.org/\(S\(35jmbntvnsjt1aadkposzje\)\)/reference/ReferencesPapers.aspx?ReferenceID=1839007](https://www.scirp.org/(S(35jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1839007)
- Jegede, P. O. & Owolabi, A. J. (2003). Computer edu-

- cation in Nigeria secondary schools: Gaps between policy and practice. *Meridian: A Middle School Technology Journal*, 6(2), 1 – 11. <http://www.ncsu.edu/meridian/sum2003/nigeria.pdf>.
- Jones, M. O. (2019). Information and Communication Technology and education: analyzing the Nigerian national policy for information technology. *International Education Journal*6(3): 316-410.
- Lee, K. D. (2020). Integrating ICTs in Nigerian Tertiary Education. The African Symposium. *An online journal of African Educational Research Networks*. 5(2) 43-50.
- Makinde, S. O., Makinde, O. O. & Shorunke, A. O. (2013). ICT literacy of language teachers in selected Lagos state secondary schools, Nigeria. *African journal of teacher education (AJOTE)* 3, 1-15.
- Morrison, D. (2016). Are teachers' technophobes? Investigating professional competency in the use of ICT to support teaching and learning. *International Journal of Environmental and Science Education*, 11(1), 39-58
- Oludipe, B. D. (2018). Science teachers' literacy level in and attitude dimensions on computer usage. *Nigerian Journal of Computer Literacy*, 10(1), 226-237
- Ross, J. & Bruce, C. (2017). Professional development effects on teacher efficacy: Result of randomized field trials. *The Journal of Educational Research*. 101(1), 50-56.
- Ugwu, R. N., & Obegbulem, A. I. (2019). Information and Communication Technology (ICT) capacity Building for Staff Personnel in Post Primary Schools for Effective School Administration. *Int. Journal for Educational Research*, 14(1), 190-201.
- Wilson, P. & Tan, G. I. (2020). Singapore Teachers' Personal and General Efficacy for Teaching Primary Social Studies. *International Research in Geographical and Environmental Education*, 13(3), 209-222.