OPEN ACCESS
UNIVERSITY OF ARUSHA ACADEMIC JOURNAL
R-ISSN: 2665-0711, E-ISSN: 2685-6645
University of Arusha (UoA), P.O Box 7, Usa River, Arusha.
Tel: +255655487985 +255754487985 Fax : +255272553626
UoAAJ
Vol. 3(2), December 2025 https://uoa.ac.tz/journal/ E-mail: editorial@uoa.ac.tz, wetengerekkj1@yahoo.com
University of Arusha Academic Journal (UoAAJ) 3(2), 2025

TEACHERS' ATTITUDE TOWARDS THE USE OF KWARA LEARN EDUCATIONAL TABLET FOR TEACHING IN KWARA STATE, NIGERIA

Nusirat B. Yusuf**, Saheed** O. Yahya**, and Barakat** B. Ibrahim
Kwara State College of Education (Technical), Nigeria
Corresponding author: nusiratyusuf@gmail.com
DOI: https://doi.org/10.69713/uoaaj2025v03i02.04

Abstract
Kwara Learn is an educational technology initiative aimed at enhancing teaching and learning in Kwara State Basic Education classes. The purpose of this study was thus to investigate teachers' attitudes towards the use of the Kwara learn educational tablet for teaching. Using descriptive research of the survey method, the study collected data from the primary school teachers in all ten local government areas in Kwara state, where the tablets have been deployed and used for teaching. A random sampling technique was used to select 192 respondents, with data collected using a researcher-designed questionnaire. The data collected were analyzed using both descriptive and inferential statistics, while all hypotheses were tested at a 0.05 significance level. The findings of the study revealed that the majority of the teachers possessed a negative attitude towards the use of the Kwara Learn educational tablet for teaching. Based on the findings of this research, it was recommended, among others, that the government and management of the basic education sector should increase investment in ICT facilities as well as retraining exercises for teachers' proficiency in the use of ICT for teaching.

Keywords: Teachers, Attitude, Learning, Tablet.

INTRODUCTION

Education is generally recognized as an important component of the development process. Hence, it is referred to as knowledge or skill acquired or developed through learning processes, activities, and resources that support learning. However, an educated society is one where growth, development, and innovation are achieved by the best use of Information and Communication Technology (ICT). This is because technology-driven innovations, major characteristics of the 21st century, have transformed the world into a globally connected community with ever-increasing ICT outreach (Yahya, 2018).

Research has shown that tablet computers and other mobile technology have been successfully used in teaching, learning, and evaluation in schools (Montrieux, Vanderlinde, Schellens, and De Marez, 2015). Tablets are computers of limited dimensions with a touch screen (mostly LCD), on which the interaction between the end user and the device takes place by means of a "stylus" pen or direct manual touch (Davidovitch and Yavich, 2021). The first tablet marketed internationally was the "iPad", developed by the Apple technology giant (manufacturer of Macintosh computers and Microsoft's major competitor) in 2010, although it was originally designed by Microsoft as early as 2000 in order to be

compatible with the "Windows XP" operating system. The device provides a user experience that almost equals that of the PC, with the option of running apps and games, watching movies, surfing the web, holding remote conversations, and so on. At present, there are many different tablets, most of which are based on the Apple "iOS" operating system, the "Android" system belonging to the Google internet giant, or the Microsoft "Windows Mobile" operating system.

As important as these tablets are, teachers' attitudes play significant roles, as these may mar the successful use of the tablets. Attitudes are a structured psychological concept with mental-cognitive and psychological-emotional roots and manifestations, which constitute an essential component of the individual's personality, existence, and perceptions. Characterizing an individual as having a certain attitude to a given object (human or inanimate, concrete, or abstract) is an acquired state based on the individual's life course and experiences, both on the factual objective level and on the interpretive subjective level (Davidovitch and Yavich, 2021).

Similarly, attitude, whether positive or negative, is also an important element in the acceptance of a technology in education (Charles, 2012). Oskamp and Schultz (2005) defined attitude as a condition of the mind with respect to responding favourably or otherwise to a given object or instance, while Mahzarin and Larisa (2010) saw attitude as a psychological tendency expressed through evaluating a given entity with some degree of favour or disfavour.

In Kwara State, Kwara Learn is an educational technology initiative aimed at enhancing teaching and learning in Kwara State, Nigeria. The programme provides educational tablets to teachers to enhance the learning experience for the students. The goal is to transform education in Kwara state by introducing digital tools, structured pedagogy, and teacher support to improve students' learning outcomes. Hence, the objective of this study was to investigate teachers' attitudes towards the use of the Kwara learn educational tablet for teaching in Kwara state.

REVIEW RELATED LITERATURE

The prevalent use of affordable mobile technology devices (tablets inclusive) is an important development for education in the current era, especially in developing countries and remote areas where computers are not available and there is limited Internet access and unreliable or no electricity (Mohammed, Balaji, Anwar & Ricky, n.d). Technologies that allow for the delivery of education to learners where there is no Internet access and limited or no electricity are in abundance. An example of this technology is the educational tablet that can conserve energy for longer use.

However, Mbarouk, Xu, Mshenga, and Shillinde (2024) opined that the incorporation of tablets is assumed to be a helpful instrument for teaching and learning and is mostly an act of emotional conviction by an individual to embrace or dispute the significance of the technology. The conviction stems from an individual's opinion that ICT tools such as tablets meet their demands, and the Technology Acceptance Model (TAM) framework has also identified perceived utility as well as the perceived ease of use of tablets as two important elements that influence how a user ultimately uses technology.

In a study by Karsenti and Fievez (2013), it was revealed that educational tablet increase motivation; provide easier access to academic-educational information, give access to its organization and sharing; foster learning and academic performance; facilitate a wider range of teaching and learning strategies; improve the

reading experience; encourage productive communication and cooperation between students and teachers and among the students themselves; improve the level of technological literacy (although the current generation of students is characterized by a higher level of this literacy versus their predecessors to begin with); nurture creative thinking; assist teachers with the evaluation process; make it easier to learn writing skills; make it easier to organize tasks and assignments in class; and significantly help students with learning deficiencies**.**

Davidovitch and Yavich (2021) conducted a study on teachers' attitudes toward to use of advanced technological tools as teaching and learning aids. The study revealed a positive attitude towards the use of technological tools for teaching. Francisco, Ernesto, Enrique and Rocio (2020) researched on attitude towards ICT: a statistical analysis of gender differences in Spanish higher education teachers, the result of their findings shows a positive teachers' attitudes towards the incorporation of ICT in teaching and research, meanwhile, a small difference have been found based on gender, but it can be affirmed that men and women present very similar levels of acceptance in comparative terms.

Olafare, Adeyanju, and Fakorede (2018) conducted research on Colleges of Education Lecturers' Attitude Towards the Use of Information and Communication Technology in Nigeria. It was reported in the study that a number of factors contribute to educators' choice of whether to use ICT when planning and teaching. Teachers' attitude, academic qualification, and teaching experience are factors mentioned by the authors. Findings of the study reported: positive attitude of COE lecturers towards ICT use; a significant difference exists between the attitude of less experienced lecturers and experienced lecturers, and a significant difference exists between the attitude of COE lecturers with a first degree and those with higher qualifications, with first degree lecturers having greater positive attitude to the use of ICT than those with higher qualifications.

Guillén-Gámez and Mayorga-Fernández (2020) carried out a study on Quantitative-comparative research on digital competence in students, graduates, and professors of faculty education. The data gathered from the research showed that academic qualifications play a significant role in the attitude of teachers towards ICT use for teaching, with lower cadre in academic qualifications having positive attitude than those at the higher cadre.

Objective of the study

The objective of this study was to investigate teachers' attitudes towards the use of the Kwara learn educational tablet for teaching in Kwara state. Specifically, the research work examined:

1. The attitude of teachers towards the use of the Kwara Learn educational tablet for teaching;
2. The influence of gender on teachers' attitudes towards the use of the Kwara Learn educational tablet for teaching;
3. The influence of educational qualification on teachers' attitude towards the use of Kwara Learn educational tablet for teaching; and
4. The influence of teaching experience on teachers' attitude towards the use of Kwara Learn educational tablet for teaching.

Research Questions

The following research questions guided the conduct of this research work:

1. What is the attitude of teachers towards the use of Kwara Learn educational tablet for teaching?
2. What is the influence of gender on teachers' attitudes towards the use of Kwara Learn educational tablet for teaching?

3. What is the influence of educational qualification on teachers' attitude towards the use of Kwara Learn educational tablet for teaching?
4. What is the influence of teaching experience on teachers' attitudes towards the use of Kwara Learn educational tablet for teaching?

Research Hypotheses

The following null hypotheses were tested in the study.

Ho_1: There is no significant difference in teachers' attitudes towards the use of the Kwara Learn educational tablet for teaching based on gender.

Ho_2: There is no significant difference in teachers' attitudes towards the use of Kwara Learn educational tablet for teaching based on educational qualification.

Ho_3: There is no significant difference in teachers' attitudes towards the use of the Kwara Learn educational tablet for teaching based on teaching experience.

METHODOLOGY

This study adopted a descriptive survey research design. The population for the study comprised public primary school teachers in Kwara State. The target population was all teachers in the public primary schools of the ten local government areas of the state where the Kwara Learn educational tablets had been deployed and used for teaching.

However, 250 respondents were randomly sampled for the study to account for attrition and experimental mortality using a proportional sampling technique to allocate the number of respondents to each public primary school based on the number of teachers, and only 192 (84 males and 108 females) teachers adequately responded to the questionnaire items. Their responses were analyzed in the study. The research instrument that was used to obtain data for this study was a researcher-designed questionnaire with two sections, A and B, using a 5-point Likert scale response modes of Strongly Disagree (SD); Disagree (D); Uncertain (U); Agree (A); and Strongly Agree (SA). Section A sought the personal information of respondents, while Section B contained ten items on teachers' attitudes towards the use of the Kwara Learn educational tablet for teaching.

To ascertain the validity of the research instrument, it was given to five experts from the faculty of Communication and Information Science (CIS), University of Ilorin, and three experts from the department of Computer Science, Kwara State College of Education, Ilorin. The reviewers helped to review the questionnaire to check the clarity of language and ensure it was relevant to the study. Their suggestions and corrections were noted and incorporated into the final draft of the instrument administered. The reliability of the research instrument was determined by administering thirty copies of the questionnaire to randomly selected respondents. After the administration and retrieval of the completed instrument, their responses to the items were subjected to statistical analysis using Cronbach's alpha reliability statistics. The Cronbach's alpha value obtained was 0.83 at the 0.05 level of significance.

The copies of the research questionnaire were administered to the study samples through personal contact by the researchers to ensure the questionnaire items were properly filled out without delay. The completed copies of the questionnaire were collected, and data obtained from the questionnaire were analyzed using mean and standard deviation for the research question 1, while an independent t-test was used to test hypotheses 1 to 2 because they consisted of variables that occurred at two levels, and hypothesis 3 was tested using ANOVA. After all, it consisted of a variable that existed at more than two levels.

RESULTS

Research Question 1: What is the attitude of teachers towards the use of the Kwara learn educational tablet for teaching?

Table 1: Mean and Standard Deviation of Attitude of Teachers towards the Use of the Kwara Educational Tablet for Teaching.

S/N		Mean	Std. Dev.
1	I am ready to embrace the use of the Kwara Learn educational tablet for teaching instead of the use of textbooks.	2.47	.751
2	I prefer reading notes for students on the Kwara Learn educational tablet to reading from the textbooks.	2.50	1.063
3	Using the Kwara Learn educational tablet is a pleasant experience in my teaching career.	2.97	.849
4	I am fearful of using the Kwara Learn educational tablet for teaching.	2.28	1.010
5	I do not feel comfortable using the Kwara Learn educational tablet for teaching.	2.53	1.002
6	Information on the Kwara Learn educational tablet for teaching is not relevant to my teaching subject.	2.13	1.056
7	The use of the Kwara Learn educational tablet for teaching improves my skills in teaching pedagogy.	2.50	1.003
8	The use of the Kwara Learn educational tablet for teaching makes me lazy and unserious.	2.13	1.222
9	Kwara Learn education tables for teaching are supposed to be used For communication and social interaction only.	2.00	1.033
10	The use of the Kwara Learn educational tablet for teaching makes teachers perform poorly in their classroom teaching activities.	1.81	.985

Table 1 reveals that the majority of the teachers possess a negative attitude towards the use of the Kwara Learn educational tablet for teaching. This is because the teachers disagreed with more of the items presented to them, such as items 1, 4, 6, 8, 9, and 10. These items have mean values less than 2.5, which translates to a negative attitude on the part of the teachers towards the use of the Kwara Learn educational tablet. While they agreed with the remaining 4 items, which are Item 2, 3, 5, and 7, this means that the teachers agreed with the 4 items because the mean values of those items are greater than 2.5, which is the grand mean value employed for the basis of comparison.

Hypothesis: There is no significant difference in teachers' attitudes towards the use of the Kwara learn educational tablet for teaching based on gender.

Table 2: t-test Analysis of teachers' attitudes towards the use of the Kwara learn educational tablet for teaching based on gender

Gender	N	Mean	Std. Deviation	t	df	Sig.
Male	84	24.4286	3.98275	2.645	90	.009
Female	108	22.4444	5.90791			

Table 2 shows that there is a significant difference in the attitude of teachers towards the use of the Kwara learn educational tablet for teaching based on gender. This is because Male (Mean=24.43, SD=3.98) and Female (Mean=22.44, SD=5.91), t (90) =2.645, p<0.05. Since the p-value is less than 0.05, it means there is a significant difference in the attitude of teachers towards the use of the Kwara learn educational tablet for teaching based on gender, meaning that the null hypothesis formulated is rejected. The difference in the perceived ease of use is in favour of Male teachers who have a higher mean value.

Hypothesis 2: There is no significant difference in teachers' attitudes towards the use of Kwara learn educational tablet for teaching based on educational qualification**.**

Table 3: T-test Analysis of teachers' attitude towards the use of Kwara learn educational tablet for teaching based on educational qualification

Qualification	N	Mean	Std. Deviation	t	df	sig
NCE	72	25.3333	4.60251	4.330	90	.000
B. Sc. Ed	120	22.1000	5.23627			

Table 3 shows that there is a significant difference in the attitude of teachers towards the use of Kwara learn educational tablet for teaching based on educational qualification. This is because NCE (Mean=25.33, SD=4.60) and B.Sc. Ed (Mean=22.10, SD=5.24), t (90) =4.33, p<0.05. Since the p-value is less than 0.05, it indicates a significant difference in the attitude of teachers towards the use of the Kwara learn educational tablet for teaching based on educational qualification, meaning that the null hypothesis formulated is rejected. The difference in the perceived ease of use is in favour of NCE teachers, who have a higher mean value.

Hypothesis 3: There is no significant difference in teachers' attitudes towards the use of the Kwara learn educational tablet for teaching based on teaching experience.

Table 4: Descriptive Analysis of teachers' attitude towards the use of the Kwara learn educational tablet for teaching based on teaching experience.

Teaching experience	N	Mean	Std. Deviation
1-5	24	24.0000	6.29700
6-15	72	22.8333	6.56281
16-35	96	23.5000	3.60701
Total	**192**	**23.3125**	**5.23643**

Table 4 presents the means and standard deviations of the three categories of teaching experience among the study's teachers, which are 1-5 years, 6-15 years, and 16-35 years. It can be observed from the table that there is a difference in the three categories of teaching experience; hence, to ascertain that the difference is significant, there is a need to use ANOVA in Table 5.

Table 5: ANOVA of teachers' attitude towards the use of the Kwara learn educational tablet for teaching based on teaching experience.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	31.250	2	15.625	.567	.568
Within Groups	5206.000	189	27.545		
Total	**5237.250**	**191**			

Table 5 shows that there is no significant difference in the attitude of the teachers towards the use of the Kwara learn educational tablet for teaching based on teaching experience. This is because F (2, 189) = .567, p>0.05. Since the p-value is greater than 0.05, it means there is no significant difference in the teachers' attitude towards the use of the Kwara learn educational tablet for teaching based on teaching experience, meaning that the null hypothesis formulated is not rejected.

DISCUSSION OF FINDINGS

On the attitude of teachers towards the use of the kwara learn educational tablet for teaching, findings from the study revealed that the majority of the teachers possessed negative attitudes towards the use of the Kwara Learn educational tablet for teaching. This finding is not in tandem with studies by Francisco, Ernesto, Enrique, and Rocio (2020) and Davidovitch and Yavich, (2021). While the present study revealed a negative attitude towards the incorporation of ICT in teaching and research, these cited studies showed in their findings positive teachers' attitudes towards the use of advanced technological tools for teaching.

On the influence of gender on teachers' attitude towards the use of the Kwara Learn educational tablet for teaching, findings showed a significant difference in the attitude of teachers towards the use of Kwara Learn educational tablet for teaching based on gender, in favour of male teachers. The result of this study affirmed the earlier study conducted by Francisco, Ernesto, Enrique, and Rocio (2020), which indicated a small difference was found based on gender in favour of males in the level of acceptance and attitude towards incorporating ICT in teaching and research based on the teachers' gender.

Influence of educational qualification on teachers' attitude towards the use of the Kwara Learn educational tablet for teaching indicated a significant difference in the attitude of teachers towards the use of Kwara Learn educational tablet for teaching based on educational qualification in favour of the NCE teachers. The result from this finding corroborates the findings of research by Guillén-Gámez and Mayorga-Fernández (2020), where a significant difference existed between the attitudes of university teachers and graduate student teachers towards ICT, with the latter obtaining an improved attitude. Also, Olafare et al. (2018) study revealed the same, that teachers with lower qualifications had a better positive attitude towards ICT use than those with higher qualifications.

Lastly, on the influence of teaching experience on teachers' attitude towards the use of Kwara Learn educational tablet for teaching, the result indicated no significant difference in the attitude of teachers towards the use of Kwara Learn educational tablet for teaching based on teaching experience. The result of this finding is in contrast with the findings from the research conducted by Olafare et al. (2018), where teachers with less work experience had more positive attitudes towards the integration of ICT than teachers with more extensive experience.

CONCLUSION AND RECOMMENDATION

Conclusion

This study examined teachers' attitudes towards the use of the Kwara Learn educational tablet for teaching in public primary schools in the state. The study concluded that most of the teachers have a negative attitude towards the use of educational tablets. The perception of the teachers towards the use of the tablet was influenced by both their gender and educational qualifications, but it was not influenced by their years of teaching.

Recommendations

Based on the findings and conclusions of this study, the following recommendations were made:

i. The teachers should be encouraged through periodic sensitization on the use and importance of the Kwara Learn educational tablet for teaching, which will improve their attitude towards its use for teaching.
ii. A workable and friendly policy devoid of gender bias should be formulated to encourage female teachers and improve their attitude towards the educational tablets (Kwara Learn).
iii. Graduate teachers in the public primary schools should be put to task on the effective use of the device (Kwara Learn tablet) so that they can shift their impression and change their attitudes;
iv. Government and management of the public primary schools in the state should continue the tempo on the monitoring and financing of the Kwara Learn educational tablet so that the positive attitude of the teachers, irrespective of their year of teaching, will be maintained; and
v. Government and management of the basic education sector should increase their investment in ICT facilities as well as retraining exercises for teachers' proficiency in the use of ICT for teaching.

REFERENCES

Charles, B. A. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. *International Journal of Education and Development using Information and Communication Technology 8(1)* 136-155.

Davidovitch, N., Yavich, R. (2021). Teachers' Attitudes to Use of Advanced Technological Tools as Teaching and Learning Aids: From an Inter-Generational Perspective. *The European Educational Researcher, 4*(3), 329-354. https://doi.org/10.31757/euer.434.

Francisco, D. G-G; Ernesto, C-M; Enrique, S-R; and del Río, R. P. (2020). Attitude towards ICT: a statistical analysis of gender differences in Spanish higher education teachers. A paper presented at the *3rd International Conference on Advanced Research in Education, Teaching and Learning. 18-10 December, 2020.*

Guillén-Gámez, F.D. y Mayorga-Fernández, M.J. (2020). Quantitative-comparative research on digital competence in students, graduates, and professors of faculty education: an analysis with ANOVA. *Education and Information Technologies, 25*, 4517-4174. https://doi.org/10.1007/s10639-020-10160-0.

Karsenti, T., & Fievez, A. (2013). *The iPad in education: Uses, benefits, and challenges - A survey of 6,057 students and 302 teachers in Quebec, Canada.* CRIFPE.

Mahzarin R. B. & Larisa H. (2010). Definition of Attitude. *Advanced Psychology of Learning and Scientific Enquiries* (p. 449). Nigeria: Totan Publishers.

Mbarouk, A. H.; Xu, Q.; Mshenga, K. R.; and Shillinde, A. M. (2024). Integration of Use

of Tablets into Teaching and Learning in Secondary Schools of Michewen District in Zanzibar. *Asian Journal of Education and Social Studies*, 50 (5), 477-488.

Mohamed A., Balaji V., Anwar A., and Ricky C. (n.d.). Use of Tablet Computers to Improve Access to Education in a Remote Location *Journal of Learning for Development*. 4 (2) 221-228.

Montrieux H, Vanderlinde R, Schellens T, De Marez L. (2015). Teaching and learning with mobile technology: A qualitative explorative study about the introduction of tablet devices in secondary education. 10 (12): e0144008. Available: https://doi.org/10.1371/journal.pone.0144008.

Olafare, F. O., Adeyanju, L. O., and Fakorede, S. O. A. (2018). Colleges of Education Lecturers' Attitude Towards the Use of Information and Communication Technology in Nigeria. *MOJES: Malaysian Online Journal of Educational Sciences*, *5*(4), 1-12.

Oskamp, S., & Schultz, P. W. (2005). *Attitude and opinions* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Yahya, S. O. (2018). Undergraduates' Access to and Attitude Towards the Utilization of Social Media for Learning in South-west, Nigeria. Unpublished Ph.D. Thesis, University of Ilorin, Ilorin, Nigeria.