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TEACHERS' ATTITUDES TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY USAGE FOR INSTRUCTIONAL DELIVERY

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Abstract

This study examined Teachers attitude towards utilization of ICT for teaching secondary schools in Ilorin Kwara State. The study is a descriptive study of the cross-sectional type. A total of 41 secondary schools were randomly selected *and random sampling technique was used to select* 253 teachers (179 from public and 74 from private schools, 123 males and 130 females) from a total of 2098 teachers in *secondary schools in Ilorin. Researchers designed a questionnaire was used to collect data for the study. Two research questions were raised and answered. Mean was used to answer research question one and independent sample t-test was used to test research question two at 0.05level of significance. The study found out that teachers have a positive attitude towards utilization of ICT for instructional delivery, gender has no significant effect on the attitude of teachers towards the use of ICT for instructional delivery but a significant effect exists based on school type. It was recommended among others that* teacher's involvement in the utilization of ICT should be increased upon.

Introduction

Information and Communication Technology (ICT) has been integrated into teaching to enhance instructional delivery. ICT is a computer-based tool used by teachers to teach information and communication processing. The major part of a computer is the hardware, software, network and digital devices like video, audio, camera etc, that convert information and resources into digital form. The computer is a programmable electronic device that performs a mathematical and logical operation, many educators as that ICT is potential of raising quality teaching and learning. ICT according to United Nations Development Plan (UNDP) as cited in Busari (2003) has been defined to include a full range of electronic technologies and techniques in managing information and knowledge.

Al-Natour, Alkhamra & Ajouni (2008) citing UNESCO (2004) ICT are those aspects of scientific, technological and engineering knowledge, and administrative methods that are used to access and process information and its applications – the interaction between computers and tools with human beings and their social, economic and cultural matters. Information and Communication Technology (ICT) are also tools within the school environment that include use for school management and administration teaching and learning of ICT related skills for improving the classroom presentation, teaching and learning intellectual problem-solving skills, for teachers and students (Adejumobi, 2012). As technology improved, educational capabilities increased correspondingly. According to Deepark and Turner (2006), the

emergence of inexpensive computer technology and mass storage media, including optical videodiscs and compact disks, has given instructional technologists better tools with which to work. Compact disks (the CD-ROM and CD-I) are used to store large amounts of data. In the new interactive delivery stations with computers and CD-ROM, CD-I, or videodiscs, a student who is interested in a particular topic can first scan an electronic encyclopedia, then view a film on the subject or look at related topics at the touch of a button.

The National Policy on Education (FRN 2013) recognized that the integration of ICT to support teaching and learning is necessary to improve learning outcome. Teachers' use of Information and Communication Technology tools to make the lesson more interesting and engaging. Hidayet (2010) also reported that most teachers using new technology in teaching and learning found it very useful and easy to use. The level of technology integration in the classroom can determine the improved quality of education of a nation. ICT has a strong effect on education and provides enormous tools for enhancing the teaching and learning process and helps to meet the learning needs of individual students to promote equal opportunity. The use of ICT is inevitable for teachers during instruction because the current learners are the digital natives who can retrieve required information within a short time, access and disseminate information such as e-books and e-journals which can be used for learning at their own pace (Danner & Pessu, 2013). Teachers are a vital link in the education chain. And for education to truly respond to the needs of the21st century, teachers must play a central role in using ICT tools in teaching and learning through the necessary skills required their competency level. Teachers need to acquire a certain competency level in ICT to be able to function effectively in the profession and their competency levels require continuous review due to emerging technologies. Teachers as an educator need to continuously improve on their competencies in the use of ICT for instructional delivery.

Regardless of the quantity and quality of ICT available for the teaching and learning processes, the key to how ICTs are used is the teacher; therefore, teachers must have the competency to exhibit the right attitude towards ICT usage as new tools evolve every day (Jane, 2009). ICT competence is the ability to combine and apply relevant skills to tasks required in the process of using ICT for teaching and learning. For teachers to be competent in the use of ICT, the teacher should be able to bring together all the attributes such as (high levels of knowledge, values, skill, personal dispositions, sensitivities and capabilities, and the ability to put those combinations into practice in an appropriate way for teaching and learning) required in the use of ICT for teaching.

Scholars like Wasserman and Richmond-Abbott, (2005), and Markauskaite (2007) have in their studies listed and classified ICT competencies required by teachers as making personal use of ICT; mastery of a range of educational paradigms that make use of ICT; making use of ICT as mind tools; using ICT as a tool for teaching and mastering a range of assessment paradigms which involves the use of ICT, and understanding the policy dimensions of the use of ICT for teaching and learning. ICT competencies are classified as basic and educational ICT competence but both are needed by teachers for effective teaching to give room for a positive attitude.

Attitude towards ICT is thought to influence not only the acceptance of ICT for instructional delivery but also future behaviour, such as used in the classroom. Teachers personal characteristics such as gender have been found to impact on teachers attitudes towards ICT usage for teaching and learning (Mumcu and Usluel, 2010). The elevation and upkeep of positive attitudes towards ICT usage, especially among teachers is of paramount importance.

Negative attitudes must not be allowed to limit the knowledge and creativity of potential ICT users, nor anxiety to interfere with the learning process. Positive teachers' attitudes towards ICT usage are critical if ICT is to be effectively integrated into the school curriculum. The utilization of ICT for the instructional delivery tool is to be maximized, as the attitudes towards it must be continuously monitored based on moderating variables like gender.

Gender has been identified as a critical factor that affects teachers' attitudes towards the usage of ICT for instructional delivery (Olafare 2014). Studies have shown gender-related studies conflicting results. Several studies have revealed a significant difference between male and female attitude towards ICT usage (Olafare 2014; Tezci, 2010). Other studies reported no significant difference between male and female attitude towards computer technology usage (Bakr, 2011; Teo, 2008). Hence, gaining an appreciation of the teachers' attitudes towards ICT use may provide useful insights into technology integration, acceptance and usage of technology for instructional delivery in Ilorin, Kwara State.

Research Objectives

The study found out teachers' attitude toward ICT usage for Instructional delivery.

Research Questions

1. What is the teachers' attitude towards ICT usage for instructional delivery in Ilorin, Kwara State?

2. What are the effects of gender and school type on teachers' attitude towards ICT usage for instructional delivery in Ilorin, Kwara State?

Methodology

Research Design

The study will be conducted using a descriptive survey research design of the cross-sectional type.

Area of the Study

The study will be conducted in all secondary schools located in Ilorin metropolis

Population

The population of this study comprises all the 41 secondary school and 2098 teachers in Ilorin metropolis

Sample and Sampling Techniques

Multi-staging sampling technique was used to determine the number of respondents involved in the study. Purposive sampling was used to select all the 41 secondary schools in Ilorin, Kwara State. Random sampling technique was used to 253 teachers of 179 from public and 74 from private schools. A total of 123 males and 130 females.

Instrument for Data Collection

The instrument for data collection is a structured questionnaire developed by the researcher for the study and called Teachers' Attitudes toward Information and Communication Technologies Questionnaire (TATICTQ). TATICTQ has three sections: 'A', 'B', and 'C'. Section 'A' sought information on personal data of the respondents on gender, and school type. Section 'B' contains items about teachers' usage of ICT equipment and the ways they learn to use ICT. Section 'C' has items to determine teachers' attitudes to ICT. The items were structured on a Likert scale: Strongly Agree; Agree; Disagree and Strongly Disagree. The response categories were

assigned numerical values of 4, 3, 2, and 1 respectively. The questionnaire (TATICTQ) was subjected to face validation by experts in the Department of Educational Technology, University of Ilorin. Reliability coefficient r of 0.82 and 0.77 were determined for the instruments using Cronbach Alpha.

Data Collection and Analysis Techniques

The questionnaire was administered to the respondents through research assistants and retrieved within two weeks. The data generated from the questionnaire were analyzed using percentage, mean and t-test statistics at .05 level of significance. Statistical Package for Social Sciences (SPSS) version 25 was used for data analysis.

Result

Research Question 1:

What is the teachers' attitude towards ICT usage for instructional delivery in Ilorin, Kwara State?

Table 1: Teachers' Attitude towards ICT Usage for Instructional Delivery

S/N	Item	Mean	SD
1.	I enjoy using ICT for my teaching and learning process.	3.54	0.31
2.	ICT usage allows me to perform effectively and efficiently.	3.07	0.25
3.	I am always motivated and interested to use ICT for my teaching.	3.39	0.63
4.	Using ICT extend communication and interaction with my students.	2.82	0.12
5.	I believe that ICT makes the subject more interesting, systematic, broad and detailed.	3.21	0.23
6.	The use of ICT allows me to gather more information about a particular topic for my instruction.	3.61	0.27
7.	Using ICT helps me to learn new things.	3.64	0.31
8.	I feel confident when it comes to working with technology in the class.	3.21	0.29
9.	The use of ICT will enhance my student's concentration on the subject matter.	2.68	0.23
10.	Using ICT for instruction will enhance productivity in my teaching.	3.41	0.27
	Grand mean	3.26	0.28

The table above revealed that teachers enjoy using ICT for my teaching and learning process, 3.54, ICT usage allows me to perform effectively and efficiently, 3.07, teachers are always motivated and interested to use ICT for my teaching, 3.39. Use of ICT will enhance my student's concentration on the subject matter, 2.68. Teachers' attitude towards the utilization of ICT as a pedagogical tool for teaching basic technology in Ilorin has an average mean of 3. 26 which is greater than an average benchmark of 2.50. This implies that teachers have a positive attitude towards the use of ICT for instructional delivery in Ilorin, Kwara State.

Table 2: Extent of usage of ICT Usage for Instructional Delivery

Items	Mean	SD
I use the internet to search for materials for teaching.	2.73	0.17
I use ICT for drill and practice.	2.81	0.09
I prepare a lesson using ICT tools.	2.28	0.21
I use ICT for communicating with students.	2.81	0.09
I do monitor and evaluation of students' performance using ICT tools.	2.78	0.05
I use ICT to demonstrate Mastery of the subject matter.	2.92	0.22
I use ICT for recording students score.	2.37	0.06
Grand mean	2.67	0.12

Table 2 further revealed that teachers use the internet to search for materials for teaching, 2.73, teachers use ICT for drill and practice, 2.8., ICT for communicating with students has a mean score 2.81, monitor and evaluation of students' performance using ICT tools has a mean score of 2.78, The average mean score for the extent of usage is 2.67. This revealed that teachers use ICT often for instructional delivery.

Research Question 2:

What are the effects of gender and school type on teachers' attitude towards ICT usage for instructional delivery in Ilorin, Kwara State?

Table 3: Effects of Gender and School Type on Teachers' Attitude towards ICT Usage for Instructional Delivery

Gender	No	Mean	SD	T	Df	Sig.	Remark
Male	123	3.26	.51	.40	251	.15	Accepted
Female	130	3.29	.47				
School	**No**	**Mean**	**SD**	**t**	**df**	**Sig.**	**Remark**
Public School	179	3.18	.51	2.11	98	.03	Rejected
Private School	074	3.39	.43				

Table 3 shows that t (251)= 0.40, p = 0.15 for gender and t(251)= 2.11, p = .036) for school type. Male has a mean score of 3.26 (0.51) and the female has a mean score of 3.29 (0.47). Public school has a mean score of 3.18(0.51) and the private school has a mean of 3.39 (0.43). This implies that gender does not have any significant effect on the teachers' attitude towards ICT usage for instructional delivery in Ilorin, Kwara State while school type has a significant effect towards teachers' attitude towards ICT usage for instructional delivery in Ilorin, Kwara State.

Discussions

The findings of the study revealed that teachers have a positive attitude towards the usage of ICT for instructional delivery. This is in line with the report of Teo (2008), who noted that the success of student learning with technology will depend largely on the attitudes of teachers and

their willingness to use the technology. A positive attitude is a necessary prerequisite and an integral part of computer literacy for instructional delivery in the classroom, so teachers' positive attitudes towards the usage of ICT is a necessary condition for effective use of ICT in the classroom.

Bakr (2011) further stressed in line with the findings of this study that attitudes possess cognitive, affective, and performance components which will be displayed by the teachers to enhance their usage of ICT for instructional delivery.

The study also found out that gender does not have any significant effect on the teachers' attitude towards the use of ICT for instructional delivery and school type has a significant effect on the attitude of teachers towards the use of ICT for instructional delivery. They may be due to the availability of the ICT tools in private schools due to public-private initiative This is inconsonant with the report of Teo, (2008) who reported no significant gender and a significant influence based on school type on the attitude of teachers in the use of ICT. However, some other studies found a significant difference between teachers' attitudes based on gender (Blankenship, 1998).

Conclusion

The study concluded that teachers are using ICT for instructional delivery because they have a positive attitude towards it. More so, teachers' gender does not affect but the type of school where the teachers are teaching (private and public) affects their positive attitude towards the utilization of ICT for instructional delivery.

Recommendation

Based on the finding of this study, it was recommended that teachers involved in the utilization of ICT should be increased upon, seminars should be organized for teachers to increase their level of knowledge and competence which will help their attitude towards usage and schools should engage and employ teachers that are competent in the utilization of ICT.

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