ASSESSMENT OF REQUISITE SKILLS FOR UTILIZATION OF INTERACTIVE WHITE BOARD TOWARDS REPOSITIONING SOCIAL STUDIES CURRICULUM FOR 21ST CENTURY TECHNOLOGY IN OGUN STATE

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Abstract

The study examined the requisite skills for utilization of interactive whiteboard towards repositioning Social Studies curriculum for 21st century technology in Ogun State. The study involves the use of a descriptive survey research design where questionnaire was used to acquire necessary data for the research work. The population for this study consists of all secondary schools Social Studies teachers in Abeokuta Metropolis, Ogun State. Simple random sampling technique was utilized to select a sample of 10 secondary schools in Abeokuta Metropolis in which five teachers were randomly selected from each of the chosen schools to make a total of 50 respondents for the study. Two research questions were raised and answered in this study. Simple percentage, mean and standard deviation statistical tools were used to analyse the gathered information. Findings revealed that interactive whiteboard (IWB) is used properly as an instructional tool for teaching Social Studies; it increases motivations on students and classroom engagement as well as

enhances teaching and learning of Social Studies. This technology device (IWB) offers teachers and students a considerable opportunity that other ICT tools may not, which include student-student interaction, collaborative learning, as well as learning autonomy through the use of certain embedded features which aids in accessing useful instructional resources in the web. Therefore, it is recommended that schools that already have training programmes in the use of IWB and other technologies in their curricula should ensure that such programmes are made compulsory to all student-teachers. Government should look into the challenges of integrating ICT to schools by providing uninterrupted power supply and dedicated bandwidths to optimally use all the features of IWB in the class.

Keywords: Requisite skills, Interactive, 21st century technology, whiteboard, utilization.

Introduction

The education sector, just like other sectors of the economy, in this 21st century, is continuously witnessing the introduction of many new technologies, with many schools and classrooms (especially in the developed country) being equipped with modern Information and Communication Technology (ICT). With these digital tools in today's classroom, the teachers have no greater choice rather than to acquaint themselves with the right knowledge required for their proper utilization in ways that will bring the expected learning experience in the 21st century learners (Mezieobi & Mezieobi, 2013).

According to Orlando (2013), ICT means all technologies used for collection, storage, edition and passing of information in diverse ways. Technology integration into curriculum can therefore be regarded as the incorporation of different technological resources (both hardware and software) such as interactive whiteboards, computers, Internet, CDs/DVDs, search engines, digital libraries, web technologies, projectors, cameras, mobile and handheld devices; and techniques such as word processing, spread sheet programming,

knowledge construction and sharing using the internet facilities, etc, into the pedagogical processes. The advantages of integrating technologies into teaching and learning Social Studies cannot be overemphasized. Evidence has shown that technology has unique features that can facilitate collaboration and communication, enhance creativity, help in the creation of mental picture of difficult concepts and duplication of documents, offers flexibility, diversity during learning and multimedia effect of concepts in Social Studies (Adediran, 2017).

Social Studies as an integrated discipline brings the social sciences together especially at basic education level. At primary school level, Social Studies emphasizes local community and the family, after primary school, the subject integrate social science and humanities to enhance knowledge of civic (Mezieobi, Fubara & Mezieobi, 2013). At tertiary level, Social Studies borrowed from sociology and political science extensively, but its curriculum is not limited to either sociology or political science as it borrows concepts of religion and humanities because Social Studies draws concept from many other disciplines and synchronize them together, it is considered to be interdisciplinary (Antigha, 2015).

Among the ICT tools, the interactive whiteboard has captured the interest of many educators, possibly due to its ability to bring different technologies together and interact with them to transform the teaching and learning of Social Studies of a classroom (Overbay, Patterson, Vasu & Grable, 2010). Interactive Whiteboard is an electronic board with touch-screen sensitivity and serve as a replacement for classroom's conventional black and white boards and simple computer screen projection. Sharpiro (2011) pointed out that an interactive whiteboard serves as an instructional tool that could be used to display computer images onto a board when a digital projector is connected to the computer. Interactive Whiteboard thus displays images of the computer screen only when in connection to a projector and computer, allowing users to interact with the computer and other technologies from the board.

Interactive Whiteboard has the potentials of revolutionizing Social Studies classrooms by improving teaching/learning, making learning interesting, interactive, engaging, motivating; and

facilitating learning in learners of different abilities, age and learning styles in the learning process. Jackson, Gaudet and McDancel (2019) remarked that using interactive whiteboards as one of the pedagogical tools enhances creativity in teaching of Social Studies and help learners in absorbing information easily, and allow teachers to accommodate all different learning styles of students. All these however, depend largely on ways by which teachers can utilize the interactive whiteboard in the classroom (Bupphachart, 2009).

Nevertheless, teachers can only use Interactive Whiteboard (IWB) technology in the classroom, when everything that may enhance adequate utilization is put in place. These involve provision of workstation equipped with technology gadgets (such as interactive whiteboards, computers, projectors, and so on), training personnel, making Interactive Whiteboard technology integrating part of teachers training education curriculum. Effective utilization of Interactive Whiteboard demands adequate time allocation, pedagogical and technical training, teachers' self-learning and self-confidence in the use of interactive whiteboard, good network connections, dependable infrastructure (Campbell & Martins, 2010).

Bupphachart, Savittrae and Michael (2009) examined teachers' IWB integration into classrooms in Australian primary school and found among others that teachers used a variety of pedagogical approaches which were in line with those they often used in their teaching when using the IWBs. Al-Faki and Abdelmoneim (2014) investigated the challenges faced by teachers when using IWB during English language classes in Saudi contexts and unveiled that many difficulties which were grouped as school administrations', teachers'/ students' and technical support's factors, were experienced by teachers when using IWB. In the same vein, Ishtaiwa and Shana (2011) investigated the effect of using IWB to promote the teaching and learning of Arabic language by pre-service teachers, looking among others, at the obstacles in using IWB as presumed by pre-service teachers; found out that insufficient time for the preparation and usage of IWB, inadequate training programmes, inadequate knowledge and skills in integrating IWB, and so on are major obstacles in using IWB perceived by Arabic pre-service teachers. Based on the researchers' knowledge and the above cited studies,

little or no empirical studies has been conducted to examine ways that teachers in Nigerian schools can use the IWB. Against this backdrop, the researchers examined the requisite skills for utilization of interactive whiteboard towards repositioning Social Studies curriculum for 21st century technology in Ogun State.

Objectives of the Study

The main purpose of this research work is to examine the requisite skills for utilization of Interactive Whiteboard (IWB) towards repositioning Social Studies curriculum for 21st century technology in Ogun State. However, the specific objectives are to:

i. examine the prospect of the use of Interactive Whiteboard (IWB) towards repositioning Social Studies curriculum for 21st century technology.
ii. determine the importance of Interactive Whiteboard (IWB) to secondary school Social Studies teachers.

Research Questions

Based on the problem mentioned, the following questions are developed:

i. What are the prospects of using Interactive Whiteboard (IWB) towards repositioning Social Studies curriculum for 21st century technology?
ii. What are the importance of Interactive Whiteboard (IWB) to secondary school Social Studies teachers?

Methods

The researcher carried out the study through descriptive survey research design. This method was taken for easy collection of data from all the groups of the population by selecting samples from the chosen population. The population for this study consists of all secondary schools Social Studies teachers in Abeokuta Metropolis, Ogun State. Simple random sampling technique was utilized to select a sample of ten (10) secondary schools in Abeokuta Metropolis in which five (5) teachers were randomly selected from each of the

chosen schools to make a total of fifty (50) respondents for the study. The research instrument adopted was questionnaire.

A draft copy of the questionnaire was given to experts in the field of Social Studies Education for corrections, suggestions, and modification before it was finally administered to the respondents. Test-re-test method of reliability was adopted to ascertain the reliability of the instrument. To test for the reliability of the research instrument, ten (10) Social Studies teachers were selected randomly who are not a part of the sample population and the value of 0.77 was obtained which is reliable enough for this study. The method of data analysis is simple percentage, mean and standard deviation statistical tools.

Results

Research Question One: What are the prospects of the use of Interactive Whiteboard (IWB) towards repositioning Social Studies curriculum for 21st century technology?

Table1: The prospect of the use of Interactive Whiteboard (IWB) towards repositioning Social Studies curriculum for 21st century technology?

S/N	Items	Agreed		Disagreed		Mean (x)	S.D
		Freq (N)	Percent %	Freq (N)	Percent %		
1.	The use of interactive whiteboard enhances Social Studies curriculum delivery.	42	84%	08	16%	3.67	.77
2.	Usage of interactive whiteboard offers more opportunity for diverse methods of teaching than traditional teaching methods.	39	78%	11	22%	3.68	.77
3.	Interactive whiteboard use exposes students to wider varieties of instructional strategies.	44	88%	06	12%	3.77	.78
4.	Interactive whiteboard will encourage students to complete lessons eagerly.	46	92%	04	08	3.75	.76
5.	IWB use for immediate feedback for lesson design and programming of activities and skills.	35	70%	15	30%	3.74	.77
Overall Total		**Mean (x) = 3.79 and STD = 0.77**					

Results in Table 1 show the prospect of the use of interactive whiteboard towards repositioning Social Studies curriculum for 21st century technology. This finding indicate the use of interactive whiteboard enhances Social Studies curriculum delivery ($\alpha = 3.67$, SD = 0.77), usage of interactive whiteboard offers more opportunity for diverse methods of teaching than traditional teaching methods ($\alpha = 3.68$, SD = 0.77), interactive whiteboard use exposes students to wider varieties of instructional strategies ($\alpha = 3.77$, SD = 0.78), interactive whiteboard will encourage students to complete lessons eagerly ($\alpha = 3.75$, SD = 0.76) and IWB use for immediate feedback for lesson design and programming of activities and skills ($\alpha = 3.74$, SD = 0.77). This reveals that the mean and standard deviation of the items listed above is very high ($\alpha = 3.79$, SD = 0.77) showing the prospect of the use of Interactive whiteboard towards repositioning Social Studies curriculum for 21st century technology.

Research Question Two: What are the importance of Interactive Whiteboard (IWB) to Secondary School Social Studies Teachers?

Table 2: Importance of Interactive Whiteboard (IWB) to secondary school Social Studies teachers

S/N	Items	Agreed		Disagreed		Mean (x)	S.D
		Freq (N)	Percent %	Freq (N)	Percent %		
6.	Social Studies teacher use interactive whiteboard for pictorial topics.	41	82%	09	18%	3.75	.78
7.	Social Studies teacher employ interactive whiteboard for presentation of lesson	47	94%	3	06%	3.83	.78
8.	The use of interactive whiteboard enhance interaction between the teachers and students	44	88%	06	12%	3.78	.77
9.	The Social Studies teacher use interactive whiteboard enhances collaboration between the teacher and learners.	46	92%	04	08	3.74	.78
10.	Social Studies teacher use interactive whiteboard for illustration	40	80%	10	20%	3.85	.79
Overall Total		**Mean (x) = 3.89 and STD = 0.78**					

Results in Table 2 show the importance of interactive whiteboard by secondary school Social Studies teachers. This finding indicates Social Studies teacher use interactive whiteboard for pictorial topics (α = 3.75, SD = 0.78), Social studies education also helps an individual to acquire appropriate skill (α = 3.83, SD = 0.78), the use of interactive whiteboard enhance interaction between the teachers and students (α = 3.78, SD = 0.77), the Social Studies teacher use interactive whiteboard enhances collaboration between the teacher and learners (α = 3.74, SD = 0.78) and Social Studies teacher use interactive whiteboard for illustration (α = 3.85, SD = 0.79). This reveals that the mean and standard deviation of the items listed above is very high (α = 3.89, SD = 0.78) showing the uptake of Interactive whiteboard by secondary school Social Studies teachers.

Discussions

Results show the prospect of the use of interactive whiteboard towards repositioning Social Studies curriculum for 21st century technology. This reveals that the mean and standard deviation of the items listed above is very high (α = 3.79, SD = 0.77) showing the prospect of the use of interactive whiteboard towards repositioning Social Studies curriculum for 21st century technology. The result is in line with the findings of Buabeng-Andih (2012), who asserted that the use of interactive whiteboard will add a whole new set of instructional strategies on how teacher interact with students. Supporting this finding is a study by Smith,Higgins,Wall and Miller (2015), who concluded that the use of IWB create interactivity and participation in lessons, provision of picture seems frequent while teaching using IWB.

Results further show the importance of interactive whiteboards by secondary school Social Studies teachers. This reveals that the mean and standard deviation of the items listed above is very high (α = 3.89, SD = 0.78) showing the uptake of Interactive whiteboard by secondary school Social Studies teachers. The result is in line with the findings of Aduke (2018) who stated that the uptake of Interactive whiteboard technology increases student comprehension

in learning process. Equally, Adeyemi (2010) suggested technology creates a learning environment essential to the development of 21st century learners.

Conclusion

Based on the findings, it was concluded that, when interactive whiteboard (IWB) is used properly as an instructional tool for teaching Social Studies, it will increase motivation for students and classroom engagement as well as enhance teaching and learning Social Studies. This technology device (IWB) offers teachers and students a considerable opportunity that other ICT tools may not, which include student-student interaction, collaborative learning, as well as learning autonomy through the use of certain embedded features which aid in accessing useful instructional resources on the web. Despite the use of the IWB by the teachers, power outage and internet failure is considered as some of the challenges in the area of operation.

Recommendations

Schools that already have training programmes in the use of IWB and other technologies in their curricula should ensure that such programmes are made compulsory to all students-teachers. Student-teachers should not always depend on their educators before they can learn the use of new technologies like IWB since they have some basic technological knowledge and skills. Stakeholders and policymakers need to examine and identify how money is spent on technology and the quality of professional development.

Moreover Interactive Whiteboard (IWB) appears to be as engaging as the lessons created and as engaging as the teacher who is presenting the lesson. Government should look into the challenges of integrating ICT to schools by providing uninterrupted power supply and dedicated bandwidths in order to optimally use all the features of IWB in the class. Much attention should be given to the development of ICT skills among teachers through training and retraining to improve and up rise teachers' technological skills.

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