Impact of Technology Enhanced Learning on Social Studies Education in Zaria Local Government Public Secondary Schools in Kaduna State, Nigeria

1 Yusuf Ibrahim Ayinde, Ph.D; 2 Ilesanmi Ajibola, Ph.D
[1]Department of Social Studies,
Federal College of Education, Zaria
08035876902
ibrahimyusuf96@gmail.com

[2]TETFund Center of Excellence for Technology Enhanced Learning
Federal College of Education, Zaria
08037022910
directorteccete@fcezaria.edu.ng

Abstract

This study examines how Social Studies instruction in Nigeria is affected by technology-enhanced learning. The study focuses specifically on examining how technology is used and how it affects teachers and students in public secondary schools in Zaria Local Government, Kaduna State. It adopts a survey research design which incorporates interviews and assessment with teachers, administrators, educational technology specialists and students. The sample size for the research consists of 322 respondents, 14 each from 23 Local Government Area of Kaduna State. Two (2) objective and two (2) research questions were adopted, using a questionnaire titled Impact of Technology Enhanced Learning on the Social Studies Education in Zaria Local Government Public Secondary School in Kaduna State, Nigeria (ITELSSE). The data collected was analysed using frequency, and simple percentage with mean score. With only 4.7% of the sampled size of Social Studies teachers being exposed to innovations in education, and of the same percentage acquiring ICT skills for teaching pedagogical classes; the teachers are not quite effectively exposed to innovations or using ICT for teaching Social Studies. The result suggests a limited technology enhanced learning adoption. It is thus recommended that more ICT equipment and training is needed to improve technology enhanced learning in Public Secondary School in Zaria Local Government, Kaduna State, Nigeria.

Introduction

Technology's increasing importance and prevalence in society and daily life have prompted recognition that teachers need to adapt their teaching methods to enhance learners' skills and better prepare them for an ICT age (Ariyanto & Laksana, 2019). Similarly, Mayowa et al. (2021) observed a growing awareness that integrating ICT into subjects in the social sciences can help achieve the educational goals of producing competent, reflective, and concerned citizens. The level of compliance with this trend in educational deliverables especially in the teaching and learning of Social Studies in public schools in Zaria Local Government, Kaduna State, has not been ascertained.

Education is an instrument for developing the quality of citizens and for developing the country. As society are aware of the importance of technology advancement as part of daily life, teachers at the ICT age have to adapt themselves to teaching to enhance learners' skills such as adaptation, self-

direction, flexibility, leadership, and responsibility.

As stipulated in the national educational philosophy and policy, societal needs must be examined, and relevant and appropriate subject methods, principles, and content must be adopted that will yield expected outcomes for social sdies and national development (Federal Republic of Nigeria, 2013). A good example of this is a subject like Social Studies. According to Martorela (1994), Social Studies has its purpose as preparing citizens to be competent, reflective, and concerned citizens.

Social Studies has been identified in the Nigerian Philosophy of education as the subject that serves to equip students with the required skills, knowledge, and values as well as dispositions relevant to producing functional and effective citizens (A. A. Ibrahim & Yusuf, 2019; Ogundokun & Ogunleye, 2018), hence the need for pedagogical integration to ensure attainment of set objectives/goals.

Social Studies pedagogy is regarded as transformative teaching for educating learners on living as an individual and cohabitation in society. Therefore, learners should be equipped with abilities to adapt themselves to the environment and various factors.

Pedagogical integration is distinctive in the teaching and learning process, focusing on theearner as a maker (Ogundokun & Ogunleye, 2018). In this process, ICT is to be integrated with teaching and learning by selecting teaching methods and objectives suitable for the contents.

The methods and activities tend to enhance learners' objectives of teaching and learning, performance evaluation and development of competencies. As the world is moving fast into digital media and information, the role of ICT in education cannot be ignored because it plays roles such as developing citizens as graduates, improving educational outcomes, and enhancing and strengthening the quality of teaching and learning (M. A. Ibrahim & Suleiman, 2017).

As asserted by Sala (2004), Kuntero, and Al-Hawamdeh (2003), the use of Information and Communication Technology (ICT) is becoming an integral part of education in many parts of the globe. This means Nigeria is not left behind as ICT enters the educational system. In Nigeria, there has been a tremendous increase in internet penetration and the use of ICT like other developing countries, particularly in the areas of education in the last few years. This is why it is crucial to examine the impact of technology–enhanced learning on social studies education in Nigeria, focusing on teacher training and pedagogical integration.

According to Bello & Suleiman (2020), one could argue that ICT in primary and secondary schools is an essential ingredient of gains and benefits that could be realized in the educational sector of some developing countries like Nigeria, especially in the study of Social Studies. Thus, the research outcome of Abdullahi & Ibrahim (2018), who investigates the enhancement of social studies education through integrating technology in public secondary schools in Zaria Local Government, Kaduna State, Nigeria, is not a surprise. The researchers have argued that technology-enhanced learning improves students' critical thinking skills, information retrieval, and collaborative learning. However, the study also identifies challenges such as limited access to technology and inadequate teacher training. However, the study is short on interrogating the challenges related to technology access and teacher training, which are crucial for successful implementation.

While it is arguable that Nigeria has adopted integration of ICT for national development and even within its educational sectors than other developing countries in Sub-Saharan Africa, most teachers in Nigeria's primary/secondary schools find it very difficult

to effectively tally their ICT instructional materials such as computers, audio-visual aids, slides, video clip, electronic whiteboards and so on to the goals of their instructional objectives (Ogunleye & Ogunleye, 2019). Thus, the exploration and discussion of ways in which ICT instructional materials could be used in schools are reasoned acceptable and good for pupils'/students' academic achievements from the perspective of a developing country become crucial.

Ogundokun & Ogunleye (2018) examined the effect of computer-assisted instruction on students' achievement in social studies in junior secondary schools in Ondo State, Nigeria. They noted that computer-assisted instruction significantly improved students' achievement in social studies. Their work also highlighted the importance of integrating technology into the teaching and learning process to enhance students' learning outcomes. In a related objective, Ibrahim & Suleiman (2017) concludes that computer-assisted instructiopositively affects students' achievement in social studies.

This research, therefore, intends to look at teachers' appropriate selection, preparation, and use of relevant ICT instructional materials, as well as their effectiveness in the operation of projected equipment to aid teaching and learning, the importance of teacher training, and pedagogical integration in successful technology-enhanced learning activities.

Statement of the Problem

Pedagogical integration focuses on examining instructional methods and teaching principles that promote student learning. Social Studies teachers use different approaches to support learning, which was spelt out to portray what teaching strategies enhance outcomes for learners in the Social Studies curriculum. Dinkelman (2004:34) commented that there is no good or bad pedagogy in the teaching and learning of Social Studies and that the use of a particular

pedagogy in teaching Social Studies depends on the teacher's expertise in the subject area. This means that feedback from teacher competence, behaviour exposure, and knowledge on the subject area should lead the teacher to achieve his set objectives. Since learning experiences in the classroom context involve pedagogical integration, there must be feedback on the set objectives of the curriculum to establish what has been achieved for the amendment of the pedagogy of the curriculum by stakeholders.

Objectives of the Study

The study objectives are to:

i. Find out the impact of educational technology on social studies pedagogy in public secondary schools in Kaduna state and

ii. Find out the impact of educational technology on teacher training and pedagogical practice in secondary schools in Kaduna State.

Research Questions

The study was guided by the following research questions:

i. What pedagogical approaches are used by teachers in the social studies instruction delivery in secondary schools in Kaduna State?

ii. Does the use of technology in education has implications for teachers' training and pedagogical practice in secondary schools in Kaduna State?

Methodology

A descriptive survey design was used for the study, and the 1000 respondents included 500 social studies students, 380 teachers, and 120 principals. A random selection technique was employed to determine the sample size of 322 respondents, which had 207 social studies students, 23 principals, and 92 teachers. A Principal from each Local Government, 4 teachers, and 9 students from each local were selected randomly from each of the 23 Local

Government Areas in Kaduna State. A standardized questionnaire that the researcher prepared was used to gather data. The instrument was given for validation. One of them was in measurement and evaluation, psychology, and the other was in languages to correct the items on the questionnaire to measure the main focus of the study.

Instrumentation

The instrument for this study is questionnaire on Impact of Technology Enhanced Learning on Social Studies Education in Public Secondary School in in Zaria Local Government, Kaduna State, Nigeria (ITELSSE) was developed for this study and addressed to various respondents with structured question developed. The instrument is a ten (10) items structured Likert-type scale questionnaire used to collect data.

The instrument was given for validation. One of them was in measurement and evaluation, psychology, and the other was in languages to correct the items on the questionnaire to measure the main focus of the study.

Data Collection

The instrument for this study was administered personally by the researcher to the respondents to enable them to respond to the statement on the questionnaire. Also, interviews were conducted, and completed copies were retrieved.

Result

The analysis was based on three hundred and twenty-two respondents used for the research. On the research questions, a decision was made by dividing frequency of occurrence by the total number of respondents and multiplied the product by 100.

RQ 1: What are the pedagogical approaches used by teachers of social studies in delivery instruction.

S/N	Item	No. of Respondents	Responses				Total		Decision
			SA	A	SD	D	Score	Mean	
1.	Teacher uses large and small group discussions during teaching.	322	160(49.7) 640	120(37.3) 360	32(9.9) 64	10(3.1) 10	1074	3.3	Accepted
2.	Teachers are to acquire skills on the use of information and communication technology to teach pedagogical class	322	164(50.9) 656	118(36.6) 354	25(7.8) 50	15(4.7) 15	1075	3.3	Accepted
3.	Social Studies Teachers are exposed to innovations in education.	322	15(4.7) 60	25(7.7) 75	122(37.9) 244	160(49.7) 160	539	1.7	Rejected
4.	Teacher uses activity and student center approach to teach pedagogical class	322	150(46.6) 600	122(37.9) 360	30(9.3) 60	10(3.1) 10	1036	3.2	Accepted
5.	Social teachers are knowledgeable competent to teach the subject matter	322	170(52.8) 680	110(34.7) 330	30(9.3) 60	12(3.7) 12	1082	3.3	Accepted
6.	Teacher uses of information and communication technology for effective teaching learning in schools	322	12(3.7) 48	30(9.3) 90	120(37.4) 240	160(49.6) 172	538	1.7	Rejected
	Mean						**5344**	**16.5**	

The mean for table 1, items 1, 2, 4, and 5 are between 3.2 and 3.3 respectively. Where it shares positive responses as regards approaches use by teachers of social studies, while items 3 and 6 indicates negative responses because the percentage (%) of those that are exposed to innovations and uses information and communication technology for effective teaching is 1.7 respectively.

Research Question 2: Does the use of technology in education has implications for teacher training and pedagogical practice.
Table 2:

S/N	Item	No. of Respondents	Responses				Total		Decision
			SA	A	SD	D	Score	Mean	
1.	The use of Information and Communication Technology promote teaching/learning in schools.	322	170(52.8) 680	115(35.7) 345	25(7.8) 50	12(3.7) 12	1087	3.4	Accepted
2.	The use of Information and Communication Technology was not effectively employed in teaching/learning in schools.	322	160(49.7) 640	125(38.8) 375	27(3.4) 54	10(3.1) 10	1079	3.3	Accepted
3.	Lack of Information and Communication Technology equipment affect teaching/learning in schools.	322	180(55.9) 720	115(35.7) 345	15(4.7) 30	12(3.7) 12	1107	3.4	Accepted
4.	Unconducive environment affect the use of Information and Communication Technology in teaching/learning in pedagogical class.	322	160(49.7) 640	120(37.3) 360	25(7.7) 50	17(5.3) 17	1067	3.3	Accepted
	Mean						**4340**	**13.4**	

The means for table 2, items 1 – 4 are between 3.3 and 3.4, respectively. The mean is 13.4. The result indicates positive responses with a high mean value. This means that the integration of technology into educational systems enhances teacher training and pedagogical practice for successful technology enhanced learning activities.

Discussion of the findings

The statistics from the table 4 revealed that majority of the teacher uses large and small group discussions during teaching, they are expected to acquire skills on the use of ICT to teach pedagogical class, they uses activity and student center approach to pedagogical class and they are knowledgeable. Most of the teachers are not exposed to innovations on ICT to enhance effective teaching and learning. They lack training and pedagogical integration in ICT, affecting the teaching learning process.

The following conclusions were made. It was revealed that most of the teachers uses pedagogical integration to improve effective teaching and learning of Social Studies. Also, most respondents agreed that teachers used large and small groups in teaching. The study concluded that using appropriate pedagogical integration in teaching played an important role in the teaching and learning process.

Finally, the study revealed that most of the respondents agreed that social studies teachers had the pedagogical content knowledge of teaching-learning strategies that

significantly enhances social studies instructional delivery in the classroom. It concluded that pedagogical content knowledge of Social Studies teachers was insufficient to help achieve the pedagogical integration needed in social studies teaching. Therefore, uses of ICT promote delivery of instruction in Social Studies class.

Conclusions

The study found that some teachers in Zaria Local Government Public Secondary School use pedagogical integration of technology to enhance teaching and learning in Social Studies. Nevertheless, the teachers are not adequately exposed to innovations or using ICT for teaching Social Studies. While all the stakeholders understand that the use of appropriate pedagogical integration of technology plays a crucial role in the teaching and learning process, it was also noted that the pedagogical content knowledge of Social Studies teachers alone was not enough to achieve the required pedagogical integration. Therefore, the provision and usage of more information and communication technology (ICT) is required to improve instructional delivery in Social Studies classes across the state.

Recommendations

It is recommended that,

1. The government of Kaduna state need to invest more on the professional development of Social Studies teachers, especially in the area of technology enhanced learning, across the state.
2. More ICT equipment and training for teachers in Zaria Local Government, Kaduna State's public secondary schools is encouraged. Such effort would
3. Teachers should be motivated through workshops and conferences to dispose themselves to high level of knowledge, skills, abilities, competencies, and commitments necessary for teaching and implementing any educational programme.

References

Abdullahi, A. B., & Ibrahim, H. (2018). Enhancing social studies education through technology: A study of public secondary schools in Zaria Local Government, Kaduna State, Nigeria. International Journal of Education, 10(2).

Ariyanto, A., & Laksana, S.D. (2019). Learning Social Sciences With Comic Strip. Proceedings of the Proceedings of 1st Workshop on Environmental Science, Society, and Technology, WESTECH 2018, December 8th, 2018, Medan, Indonesia.

Bello, A. A., & Suleiman, A. (2020). Integrating Technology in Social Studies Education: A Case Study of Zaria Local Government Public Secondary Schools, Kaduna State, Nigeria. Journal of Education and Practice, 11(6), 1–10.

Dinkelman, T. (2004).Reflecting and resistance: The challenge of rationale-based teacher education. Paper presented at the American Educational Studies Association.

Federal Republic of Nigeria. (2013). National Policy on Education (6th ed.). Lagos: NERDC Press. Retrieved from http://www.nerdc.ng/national-policy-on-education

Ibrahim, A. A., & Yusuf, M. O. (2019). Impact of Technology Enhanced Learning on Students' Achievement in Social Studies in Zaria Local Government Public Secondary Schools, Kaduna State, Nigeria. International Journal of Education and Research, 7(5), 1–14.

Ibrahim, M. A., & Suleiman, A. (2017). The impact of technology-enhanced learning on social studies achievement: A study of secondary school students in Zaria, Nigeria. Journal of Educational Technology, 14(3), 112–128.

Mayowa, A.S., Olujimi, A.S., Oyeyemi, Ahmed, & Ademola (2021). Effect of Science Teachers' Competence and Attitudes Towards ICT integration in Teaching of Science Subjects in Secondary Schools in Anambra State, Nigeria.

Mensah R. O (2020) Pedagogical Analysis of Teaching Social Studies. An Empirical Literature Review. Journal of Humanities and Social Sciences 3: 66-76.

Ogundokun, M. O., & Ogunleye, A. O. (2018). Effect of computer-assisted instruction on students achievement in social studies in junior secondary schools in Ondo State, Nigeria. Journal of Education and Practice, 9(6), 1–7.

Ogunleye, A. O., & Ogunleye, A. O. (2019). Integrating technology in social studies education: A case study of Zaria Local Government Public Secondary School in Kaduna State, Nigeria. Journal of Educational Technology, 16(2), 45–62.