



**ASSESSMENT OF OF THE RELEVANCE OF INFORMATION AND
COMMUNICATION TECHNOLOGY IN TEACHING AND LEARNING OF
GEOGRAPHY IN SOBA LOCAL GOVERNMENT AREA OF KADUNA STATE.**

***SADA SHU'AIBU; & **DANASABE HUDU**

*Department Geography Kaduna State College of Education Gidan Waya,
Kafanchan, Kaduna State. **Department of Social Science and Humanities,
Kaduna State College of Education Gidan Waya, Kafanchan, Kaduna State

Abstract

This paper assessed the relevance of information and communication technology in the teaching and learning of geography in Soba Local Government Area of Kaduna State. It involves (80) students drawn as respondents from the four (4) randomly selected secondary schools in the study area. Questionnaire was used to collect the responses from the respondents. (37%) of the respondents strongly agreed that ICT helps a lot in the effective teaching and learning Geography. (38%) of the respondent strongly agreed that ICT arouses learners' interest when effectively utilised by the teacher. (40%) of the respondents strongly disagreed that learners became passive when using ICT gadgets by the teacher. While (38.75%) and agreed that learning becomes faster when ICT facilities are used. (50%) of the respondents strongly disagreed that there is adequate provision of ICT facilities in their schools. It was recommended that teachers should effectively use ICT facilities for easier lesson delivery. Government, NGOs, parents and individuals have been encouraged to provide ICT facilities in schools.

Key words: Relevance, Information and communication technology, learning,

Introduction

Investment in education is critical to narrowing the knowledge gap and is fundamental to the development of the capacity for integrating knowledge into social and economic activities and for participating in today's digital economy.

Governments in Africa have tried to put emphasis in education since independence. This has seen many government increasing budget allocations in education (UNESCO, 2012). The move is motivated by the fact that education is the cornerstone of economic growth and development. Apart from expanding allocation to education, governments have been reforming their education system especially in the less developed countries. Education reform efforts in less industrialized countries have aimed at making education an effective vehicle for national development (Abagi and Odipo, 2016).

ICT is now at the center of education reform as seen changes in curriculum, teacher training, pedagogy, and assessment (Kozma, 2016). ICT is an effective tool that if integrated successfully forms a key pillar of education training (Tomar and Kumari, 2017). ICT sector has the potential to generate economic development and create pathways into the knowledge economy (Maguire, 2018).

The adoption of ICT into the practice of education is not something that began with the emergence of the new digital technologies; technologies such as radio, telephone and television (Farrell, 2018).

There is a growing interest in using computers at the secondary level to improve instruction which involves a variety of applications, mainly utilizing Internet access and create the opportunity to exchange ideas, consult experts, take students on virtual field trips, and access online libraries (World Bank 2017).

ICT enabled communications build human capabilities and freedoms and also offer students the opportunity to learn how to use electronic tools to access information and develop research skills in solving problems. United Nations and the World Bank reported that ICT can increase access to education network for students, train teachers and, broaden availability of quality education material for emerging global economies (World Bank 2017).

Many schools are restructuring to accommodate ICT's as it is of great help in providing multimedia information and allow access to a broader range of instructional resources. Most teachers see ICT as an important tool for motivating students, providing excellent tools for supporting teaching and also help learning. The schools also acknowledge that administrative functions have been enhanced by the computers .ICT spending is mostly on hardware, software, infrastructure and training. ICT integration in schools therefore requires investment in equipment, professional development and teacher training, technical support, connectivity and digital learning process. Investments in custom-made digital materials with highly relevant content for Nigerian classrooms in rural and urban contexts are important in order to tap into potential of ICTs for teaching and learning geography. Computers are spreading rapidly in schools not just in wealthy countries, but increasingly in developing ones as well. However, although schools have had computers for almost two decades, ways to use them effectively have evolved slowly and patchily. Technological revolution in schools has been beset by theoretical inadequacies that have kept educational technology at the margins of the established educational system. Research findings across the country have revealed that there are ICT facilities in the secondary schools such as computers, computer laboratories, internet connections, alongside the traditional methods of telecommunication.

Further research has revealed that teachers do not effectively use ICTs at their disposal. Hence, this leads to weak integration and usage in classroom activities-teaching and learning geography. In addition, most secondary schools in Nigeria are in the rural areas and they face a number of challenges including; high levels of poverty, limited rural electrification and frequent power disruptions, inadequate connectivity and network infrastructure. This creates a digital divide between the rural and the urban schools as well as the developed and the developing countries. Failure to take full advantage of the opportunities offered by technological advances to education for massive expansion represent a drastic lag in skilled innovative manpower narrowing the possibilities for individual activities in areas of business, research, learning, health and welfare and many other aspects of daily activities.

Aim and Objectives of the Study

The purpose of the study was to assess the relevance of information and communication technology (ICT) in the Teaching and Learning of Geography in Soba local government area of Kaduna state. While the objectives were to;

- i. Identify the importance of ICT in teaching Geography in Senior Secondary Schools in Soba local government area.
- ii. Identify the attitude of teachers' and students and challenges on the use ICT in teaching and learning Geography Soba local government area.
- iii. To establish ways on how enhance the effective use of ICT in teaching and learning geography in senior secondary schools in Soba local government area.

Research Questions

- i. What is the importance of ICT in teaching and learning of geography in senior secondary schools Soba local government area?
- ii. What are the challenges faced by teachers' and students' in using ICT to teach geography in Soba local government area?
- iii. How can we enhance the use of ICT in teaching and learning geography in senior secondary schools in Soba local government area?

RESEARCH METHODOLOGY

Study Design

The study used the descriptive survey research design. Ali (2016) defined descriptive survey as a design which seeks or uses the sample data of an investigation to document, describe and explain what is existent or non-existent on the present status of a phenomenon being investigated.

Study Area

The research was carried out in Soba Local Government Area of Kaduna State, North-western Nigeria.

Population of the Study

The research population covers four [4] secondary schools in Soba Local Government Area of Kaduna State. The population considered in this research include:

- Government Secondary School Gamagira
- Government Secondary School Gurbabiya
- Government Secondary School Tudun Saibu
- Government Girls Secondary School Yakasai

Sample and Sampling Techniques

The sample for the study consists of 80 respondents, 20 drawn, randomly from the selected schools in the study area.

Instrument for Data Collection

The instrument used for data collection was the questionnaire titled “Assessment of the Relevance of Information and Communication Technology In Teaching and Learning of Geography In Soba Local Government Area of Kaduna State”. This was used to gather information from respondents for the research.

Method of Data Analysis

Data collected from the respondents was analysed using the percentage method. The percentage was calculated as the response to each question divided by the total numbers of copies and multiplying the result by hundred.

$$\text{Percentage} = F/N \times 100\%$$

Where:

F = Frequency of particular responses

N = Total number of responses

X = Symbol for multiplication

% = Percentage of the sample, or responses.

Data collection, analysis and presentation.

Four questions were used to ask the participants within the school premises on their perception of “the relevance of information and communication technology in the teaching and learning of geography in Soba local government area of Kaduna state”.

Table 4.1: Learning of geography is fun and effective when taught with ICT gadgets

Responses	Frequency	Percentages
Agreed	20	25
Strongly agreed	30	37.5
Disagreed	10	12.5
Strongly disagreed	20	25
TOTAL	80	100

Source: Authors' field work,(2023)

From the table above shows that, 20 respondent representing 25% agreed and 30 respondent representing 37.5% strongly agreed that Learning of geography is fun and effective when taught with ICT gadgets. While 10 respondent representing 12.5% disagreed, 20 respondent representing 25% strongly disagreed that Learning of geography is fun and effective when taught with ICT gadgets.

Table 4.2: Students' interest is aroused during geography lesson when the teacher uses ICT teaching facilities.

Responses	Frequency	Percentages
Agreed	19	23.75
Strongly agreed	31	38.75
Disagreed	9	11.25
Strongly disagreed	21	26.25
TOTAL	80	100

Source: Authors' field work, (2023).

Table 4.2 above shows that, 19 respondent representing 23.75% agreed, 31 respondent representing 38.75% strongly agreed that Students interest

is aroused doing geography lesson if the teacher use ICT teaching facilities. While, 9 respondent representing 11.25% disagreed, 21 respondent representing 26.25% strongly disagreed that Students' interest is aroused during geography lesson when the teacher uses ICT teaching facilities.

Table 4.3: ICT gadgets distract learners' attention from geography lessons

Responses	Frequency	Percentages
Agreed	10	12.5
Strongly agreed	20	25
Disagreed	18	22.5
Strongly disagreed	32	40
TOTAL	80	100

Source: Authors' field work, (2023).

From the table above, 10 respondent representing 12.5% agreed and 20 respondent representing 25% strongly agreed that ICT gadgets distract learners from the main lesson. While 18 respondent representing 22.5% disagreed, 32 respondent representing 40% strongly disagreed that ICT gadgets distract learners' attention from geography lessons

Table 4.4: Students become passive learners in an ICT driven geography lesson

Responses	Frequency	Percentages
Agreed	10	12.5
Strongly agreed	20	25
Disagreed	18	22.5
Strongly disagreed	32	40
TOTAL	80	100

Source: Authors' field work, (2023)

From the table above, 10 respondent representing 12.5% agreed and 20 respondent representing 25% strongly agreed that Students become passive learners in an ICT driven geography lesson. While 18 respondent representing 22.5% disagreed, 32 respondent representing 40% strongly

disagreed that Students become passive learners in an ICT driven geography lesson.

Table 4.5: Geography teachers are versed in using ICT to teach geography

Responses	Frequency	Percentages
Agreed	20	25
Strongly agreed	30	37.5
Disagreed	10	12.5
Strongly disagreed	20	25
TOTAL	80	100

Source: Authors' field work, (2023)

The table above shows that, 20 respondent representing 25% agreed and 30 respondent representing 37.5% that our geography teachers have been trained and are literate in using ICT to teach geography. While 10 respondent representing 12.5% disagreed, 20 respondent representing 25% strongly disagreed that Geography teachers are versed in using ICT to teach geography

Table 4.6: Geography lessons are learnt faster when taught using ICT facilities.

Responses	Frequency	Percentages
Agreed	31	38.75
Strongly agreed	23	28.75
Disagreed	14	17.5
Strongly disagreed	11	13.75
TOTAL	80	100

Source: Authors' field work, (2023).

The table above shows that, 31 respondent representing 38.75% agreed and 23 respondent representing 28.75% strongly agreed that learn geography fast when taught with computer technology. While 14 respondent representing 17.5% disagreed, 11 respondent representing 13.75% strongly disagreed.

Table 4.7: Using ICT gadgets to teach geography is student- friendly

Responses	Frequency	Percentages
Agreed	20	25
Strongly agreed	30	37.5
Disagreed	8	10
Strongly disagreed	22	27.5
TOTAL	80	100

Source: Authors' field work, (2023).

The table above shows that, 20 respondent representing 25% agreed and 30 respondent representing 37.5% that Using ICT gadgets to teach geography is student friendly. While 8 respondent representing 10% disagreed, 22 respondent representing 27.5% strongly disagreed.

Table 4.10: There is adequate provision of ICT facilities in our school

Responses	Frequency	Percentages
Agreed	10	12.5
Strongly agreed	20	25
Disagreed	10	12.5
Strongly disagreed	40	50
TOTAL	80	100

Source: Authors' field work, (2023).

The table above shows that, 10 respondent representing 12.5% agreed and 20 respondent representing 25% strongly agreed that there is adequate provision of ICT facilities in our school. While 10 respondent representing 12.5% disagreed, 40 respondent representing 50% strongly disagree that there is adequate provision of ICT facilities in our school.

Summary/Conclusion and Recommendation

Based on the findings, Information and Communication Technology (ICT) can be best be applied in teaching geography. it has enormous and positive effects; that its application is not without a challenge, but that the challenges can be resolved when some measures are properly put in place.

Some of these measures have been found to include staffing, financing, motivation, remuneration, etc.

Recommendations

From the findings of this study, the researchers therefore recommend that:

- Information and Communication Technology (ICT) should be applied by every Geography teacher in their classroom interaction, to facilitate learning, improve performance, enhance increased productivity, and professionalism.
- Sufficient ICT tools and facilities should be provided to tackle the perceived inadequacy. deficiencies in schools.
- ICT should be incorporated at all levels of Geography teachers' education curriculum to train both geography students and teachers.
- Trained, certified and qualified geography teachers should be employed to teach geography in secondary schools.
- ICT tools and facilities should be made available to schools, teachers and students.

Reference

- Abagi, O. and Odipo, G. (2017). Efficiency of primary education in Kenya. Countries, Center for Technology in Learning SRI International 333 Development chrisanthiavgeroulond on school of economics.
- Kamal & Qureshi, (2019). The ICT Impact Report *A review of studies of ICT impact on schools in Europe* European School net in the framework of the European Commission's ICT cluster.
- Kozma R.B. (2016). ICT and educational reform in developed and developing Labelle(2017) E-learning in secondary schools in Kenya: a case of the Nepad e-schools Maseno University, Kenya. *Educational Research and Reviews* Vol. 5 (5), pp. 218-223, <https://www.academicjournals.org/ERR2> ISSN 1990-3839 © 2010 Academic Journals
- Langamia (2017), a review of the research literature on barriers to the uptake of ICT by teachers. [Becta.www.becta.org.uk/page documents/research/barriers.pdf](http://www.becta.org.uk/page/documents/research/barriers.pdf)
- Maguire D.W.(2018). The use of clusters to build an ICT industry, informing science Nairobi: Regal Press. New Delhi
- .Spence and Smith (2018), Teacher professional engagement and constructivist-compatible computer use. Teaching, learning and computing: 1998 National Survey. Report Center for Research on Information Technology and Organizations.
- Tomar and Kumari, (2005). Education Technology. Shree Publishers and Distributors, UNESCO (2012), World Educational Forum; A Statistical Document. Dakar, World Bank (2017), ICT and MDGs: A World Bank Perspective. Washington: World.