

# **APPLICATION OF INFORMATION COMMUNICATION TECHNOLOGY (ICT) IN THE TEACHING AND LEARNING OF GEOGRAPHY AND CHRISTIAN RELIGIOUS STUDIES IN THE SECONDARY SCHOOLS**

By

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## **Abstract**

From ages, human beings have been passing information on various issues from one generation to another using different modes. This has been chronicled in the varieties of literatures and Holy Bible as well. This paper therefore aims at looking at the relevance of modern day mode of passing Information and documentation of religious geographical events compared with historical telling of events. ICT - Information Communication Technology is examined as an instrument of passing and recording information in a large extent especially for evangelism of gospel and environmental awareness for the young ones in school especially the post primary educational section in Nigeria. Questionnaire was designed to collect information from SSS III students. The data analysis were presented using percentage. The result shows that there were well available ICT facilities but not adequately used in disseminating information in Christian religion and geograph interrelated disciplines. This is reflected in their performance in the classroom even at their level of concentration in learning; it was equally observed through this study that a large percentage of the students and teachers were not conversant with adopting the biblical story telling and landform and environmental relationship. Psalm 23:1 - 3. The findings show that the use of ICT is not effective in most secondary schools in teaching biblical concepts as well as geograph related topics due to low level of students achievement in religio-geographic topic (Genesis 1 : 2 - 6): Teachers are not well equipped in the art of ICT. Based on the finding therefore, some recommendations were made to all teachers especially geography and Christian religions knowledge to adopt the use of ICT and observe the students performance in the classroom. Teachers need to be encourage not only in the schools but places of Christian worshipping centre. Government should provide ICT facilities to schools for effective instruction in imparting both religious and geographic knowledge in the classroom. Fund should also be made available for the purchasing of ICT facilities in all schools.

**Keywords:** Application, Information Technology, Geography, Christian Education.

## **Introduction**

From time immemorial, technology as one of the greatest inventions of man has really influenced his experience in various ways. For instance, it has turned almost devastated environment of man to a livable one. Also, what man eats, drinks, wears, even the mode of his communication have been greatly influenced by technology (Akinye, 1998, Sansanwal, P.N, 2009).

There has been tremendous technological revolution of different spheres of man's life, but in recent time, the greatest of this, is in the field of telecommunication. Wikins (2000) lays emphasis on this assertion in her expression that "Another type of revolution has been taken place and it is the revolution in the various four means of communication (Rahan I, 2002) brought about largely by communication. This is not only in geography but in the field of religion, Christian religion in particular.

Innovation today, the continuous development in communication technology has brought about the evolution of information technology which is fast growing and continuously affecting positively every aspect of human endeavours be it educational, economic, political social and religious. Through this technology man has turned the whole world into a global village.

Networking of computer gives birth to information technology (IT) United Nation Economic State Commission (UNESCO) considered Information Technology as scientific technological and engineering discipline and management techniques used in information handling and processing their application.

This paper looks at the relevance of information and communication technologies in the teaching and learning of Geography as well as disseminating of gospel in Nigeria with a particular attention in Ondo West Local Government Area of Ondo State.

## **Purpose of the Study**

This paper evaluates the field work method and lecturing technique in teaching and learning of both Geography and bible with the adoption of ICT techniques also to provide the students first hand information under investigation. Apart from this, there are some specialized skills that can be acquired through participation in (ICT) Information Communication Technology,

### **These includes:**

- i. Provision of an avenue for the development of the cognitive, affective and psychomotor domain of the students.
- ii. The enhancement of memory retention. For instance biblical quotation etc.
- iii. Development of the spirit of understanding of the other people coexistence and cooperation at all level.
- iv. Development of the ability to adapt to any unpleasant situation.
- v. Development of environmental consciousness in students.

## **Review of Relevant Literatures**

The evolution of man along racial lineage has painfully set the tone for divergent of thinking and exposed to sophistication or technology as a means of enhancing living social, academics and industrial revolution whose mechanism had been developed by renowned scientist, technologist and engineers. It created a new order of living where knowledge reigns supreme and information sharing move rapidly and long distance. (Adebisi, D 2007) (Amen, C. O, 1991).

## **Student Skill and Information Literacy Meeting the 21st Century Challenges**

A widening gap has been formed between the knowledge and skills students acquire in school and the knowledge and skills needed to succeed in the increasing global technology in 21st century.

Representatives of information communication intimacy skill have the following six areas as critical to student success in the workplace (Balogun 1977, Salawu, Afolabi and Taiwo 2001)

- i. *Communication Effectively*: students must have a range of skills to express themselves not only through paper and pencil but also audio, video, animation design software as well as a host new environment (*e-mail, websites, message board, blogs streaming media etc*).
- ii. *Analyze and interpret data*: students must have the glut of data, know the new available web-based and other electronics formats.
- iii. Understands computational modeling
- iv. *Manage and prioritize task*: students must be able to manage the multi-tasking selection and prioritizing across technology application that allow them move faster among teams and community of practice.
- v. *Engage in problem solving*: students must have an understanding of how to apply what they know and can do to new situations.
- vi. Ensure security and safety: students must apply and use strategies to acknowledge, identify and negotiate 21st century tasks.

## **The Role of ICT in the Learning of Geography**

Information communication technology (ICT) can play the role of patience instruction. It consistently work at the learner's pace, assisting students to acquire a set of information skills, facts etc, it can present drill and practices to the teacher advancement, the main content of using information communication technology as we often found in computer assisted instruction (CAI), this is the individual master and task he moves on to the next one. The teacher can take advantage of the dynamism of ICT to demonstrate some difficult concept theories and principles in Geography Some programmed instructions and softwares are capable of giving feeding back very accurate information in Geography to teacher about the industrial progress of all Geography students in the class. The school can have a software providing variety of choice of computerized topic in geography, such as remote sensing, Geography information system (GIS) Population Geography, Physical Geography, Regional Geography, Urban and Regional Planning. Abraham, M.S (2003).

## **The Role of ICT in the Learning of Christian Religious Knowledge**

The mode of teaching Christian religious knowledge in the past decade hangs on the verbal interpretation of the bible and use of memorizing social key verses in the bible. Nowadays, things have changed, the population on ground as an audience of the congregation is big and well enlightened.

There are various events that are in the bible that ICT if available by then could have been a very means of storing the events. For instance the story of creation of the earth, when God ordered that water should move to one side and soil on other side. The use of ICT could have been very useful to document the events.

The journey of Israelites from the land of Egypt is another fantastic event that could be well chronided if the ICT was available by then. It is now better presented nowadays for those in Christian theatre and singers made use of these modern gadgets and their messages have been well documented. These people passed through desert, reed sea (popularly called

red sea) mountain and various ethnic groups. The use of ICT could have been useful to document all these features and events. Distribution of land to Israelites by Joshua could have been well documented with aid of ICT. Nowadays, the presence of ICT has aided the spreading of God's words to the world and monitoring of the new converts can easily be carried out.

### **The Impact of (ICT) on Geography Teachers**

Geography teacher is provided with the readymade materials for teaching geography in a given area. It provides easy production, storage retrieval and modification of course materials. It increases intention time among geography teachers to exchange ideas pertaining to the subject. The teacher has access to many libraries in the world through internet facilities. Sequel to the brief advantage of information communication technology to geography teacher, the new communication has enabled borders and time to the extent that the remotest villages and town in Nigeria have the advantages and possibility of tapping a global store of knowledge. Development in technology greatly facilitate the opportunity to enhance their education system, improve their policy formation and widen the range of opportunities to receive vast amount of information from anywhere in the world in a second. ICT can be also applied in teaching when dealing with a large number of students inside and outside the country. The geography teacher, information and energy or moving from class to class and as well as a prerequisite to empower classroom teachers as a modern approach in the teaching-learning process.

### **Challenges of ICT in Learning and Teaching Christian Religious and Geography**

Nigeria as part of the ones which has now been contacted by ICT into a small globalized community, cannot be left out on the scheme of things. According to (Akinye, 1998, Sonny Arogbu 2006). "In a world that has become a global village, where information travels faster than the speed of light, any country that stands aloof, whether out of ignorance or out of poor appreciation of this basic necessity will certainly be content with backwardness".

Nigeria cannot afford to be backward. Yet in joining the rest of the world in adopting ICT, it is based on the several problems among which are the following:

- i. *Electric Power Supply:* Electric power supply is below meaningful level despite the huge investment of the present and past government yet, information communication technology (ICT) depends on the electric power to work.
- ii. *Poverty:* Though Nigeria is a wealthy country, majority of her citizens languish in poverty. In these circumstances, the population of those who can engage in or operate the information communication technology business with their own finances is low. That is why educational researches or inquiries cannot afford pieces of equipment needed to operate multimedia devices like CD ROM which comes with some foreign books.
- iii. *Low Tele-density:* The tele-density of Nigerian is of the lowest in the advent to the GSM and the fixed wireless loop (FVL) telephones that the country managed by the year 2001 to increase its access to telephone lines to 2.5 million from 430, 000lines.
- iv. *Inadequate policy for mutation and implementation:*

In Nigeria, information communication appears to be more workable in such fields like engineering, medicine and agriculture than in education. For instance, in the rural area, due to weak educational policy and absence of electric supply, the use of projected media such as over head projector to teach nursery, primary and post primary school pupils is impossible.

## Methodology

The paper focussed on the relevance of information communication technology, (ICT) in the teaching and learning of Geography and religion in secondary schools in Ondo West Local Government Area of Ondo State. Using secondary school students and teachers as the population, the use of questionnaire was adopted to collect the relevant information based on the focus of the paper, thus students and teachers of sampled schools were allowed to react to the items of the questionnaire. For the study, 160 pieces of questionnaire were prepared. 150 questionnaires were given to the students and ten (10) to the teachers. These were collected, gathered and arranged properly for analysis, using percentage as a statistical tool.

## Data presentation and Analysis

The following research questions were used to guide the researcher in analysis and report of the finding.

- i. Are ICT facilities available in your school and your place of worship?
- ii. Does your teacher and pastor make use of ICT in teaching?
- iii. What is the perception of teacher on the use of ICT?
- iv. What are the challenges confronting the use of ICT facilities in the secondary schools and churches?

**Table I: Availability of ICT facilities in the secondary schools and Christian Religious Centres.**

S/N	ITEMS	Total	Yes	%	No	%
i.	Having ICT facilities in the school.	150	150	100		
ii.	Teacher makes use of ICT in their teaching and preaching.	150	45	30	105	75
iii.	Allowing students to make use of ICT facilities in the school and places of worship.	150	93	62	57	38
iv.	There are enough ICT facilities in the school and churches.	150	113	75.5	35	24.5

With reference to table I above, it can be observed that 100% i.e. all schools under have ICT facilities 133(75.5%) responses have enough ICT facilities and 37(24.5%) responded negatively. Still observing from the table I, 93(62%) of the students have access to ICT facilities while 38% do not have access to the ICT facilities in their schools.

**Table II**

S/N	ITEMS	Yes	%	No	%
v.	Some physical aspect of Bible and Geography are more interesting and explanatory when ICT facilities are used in teaching them.	114	76	36	24
vi.	I personally interact with computer on my own.	120	80	30	20
vii.	There are functioning ICT facilities in the school and churches	87	58	63	42
iv.	I have better Understanding When ICT is used in teaching in the classroom and churches .	68	48	82	52

The table II above shows that 114(76%) reacted positively that the use of ICT target make the teaching of physical aspect of Geography interesting while 3(24%) reacted negatively.

Observing from the table also, 120(80%) have been improved with the use of ICT facilities while 30(20%) are of the negative opinion. With the understanding of the subject, 68(48%) responded that they have better understanding when ICT facilities are being used to explain the concept of Geography and religion.

**Table III: The challenges facing the use of ICT facilities.**

S/N	ITEMS	Yes	%	No	%
i.	Electricity supply constitute a major problem for maximum utilization of ICT in the school and church.	101	67.3	49	32.7
ii.	Teacher makes use of ICT in their teaching and preaching.	101	67	49	32.7
iii.	Poor attention whenever teacher makes use of ICT in the classroom and church.	113	75.4	37	24.6

With reference to the table III above, the poor electricity supply constitutes a major problem to the maximum utilization of ICT in the secondary schools of the study area for 101(67.3%) responded positively while 49(32.7) were of negative opinion to this belief of poor funding lack of financial assistance in subscribing to personal ICT facilities is another problem confronting the use of ICT facilities. This is established by the 101(67%) responded positively while 49(32.7) were of negative opinion to this belief of poor funding. Lack of financial assistance in subscribing to personal ICT facilities is another problem confronting the use of ICT facilities. This is established by the 101(67%) responded positively while 49(32.7) were of negative opinion. Feeling attracted and poor attention whenever teacher makes use of ICT in the class is another challenge facing the use of ICT in the class. 133(75.4%) responded positively and 37(24.6%) were of the negative opinion.

**Table IV: Teacher perception of ICT in teaching of Geography**

S/N	ITEMS	Yes	%	No	%
i.	Be a computer literate.	10	100		
ii.	Having ICT facilities in our school and church.	10	100		
iii.	Government provision of ICT facilities into schools and church	07	70	03	30
iv.	Government maintenance of the ICT facilities.	08	80	02	20
v.	ICT facilities used in teaching Geography in school and church	04	40	06	60
vi.	ICT helps to improve the assimilation of the subject by the student.	05	50	05	50
vii.	Students feel attracted whenever ICT facilities are used in teaching and learning of Geography.	08	80	02	20

Explaining from the above table IV, all teachers reacted positively that they are computer literature 10(100%) for ten teachers were selected. All the teachers responded positively that there is (ICT) facilities in their school 7(70%) provide ICT facilities for their school while 3(30%) responded negatively. With government maintenance of the ICT facilities, 8(80%) responded positively while 2(20%) did not agree. The use of ICT facilities, used in teaching Geography, while 6(60%) do not make use of ICT facilities in teaching Geography. The idea of ICT helps to improve the assimilation of students was half and half i.e. 5(50%) responded positively and 5(505) responded Negatively, majority of the

respondents, which was 8(80%) were of the positive view about student feel attracted whenever ICT facilities are used in teaching and learning of geography and religion.

### **Discussion of Findings**

The information collected through the administration of questionnaire for this work helped to determine the relevance of information and communication technology in teaching and learning of geography, religion and the availability of the ICT facilities in teaching and learning geography. The availability of the ICT facilities is enough in some secondary schools, yet they are not effectively utilized by the teachers of the subjects.

The perception of the teachers on the use of ICT is more encouraging in the schools. Students are conversant with the use of ICT that is computer for e-mail and other relevant information. Also, the use of ICT facilities has brought positive changes to the orientation of students and teachers to bring better performance within and outside the school environment.

The students are allowed to have access to operate ICT (computer) facilities outside the school. It equally brings improvement to the teaching and learning of geography, religion and it brings positive change to students' performance in school, help to keep close contact, share knowledge and experience teachers within and outside the school.

### **Recommendation**

The focus of this paper is to look into the roles that the use of ICT are playing in the teaching and learning of Geography and religion in secondary school in Ondo West Local Government Area of Ondo State and elsewhere. In order to achieve this, recommendation are put forward for both the government at all levels and every personnel in the teaching and learning of geography and religion.

- i. A network with adequate facilities to access local and international acceptable data base should be put in place.
- ii. The young learners should be empowered through various programmers in the anticipation of the challenges in information and communication technology as a device towards purposely creativity.
- iii. Workshops and seminars should be regular features of training for teachers and students. This will give operators of mass education programme a firsthand knowledge of how to operate or use certain resources.
- iv. Government should make the supply of electricity a functional one in the country generally and schools in particular.

### **Conclusion**

The relevance of information communication technology in the teaching and learning of Geography and Christian education has provided a major opportunity for developing learners knowledge in the use of internet and computer application. All these can sustain the present generation in achieving a greater height in their field of learning and also other field of learning. There is no doubt that information communication technologies are vehicles for social transformation and technology transfer.

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