

# NIGHTINGALE PUBLICATIONS AND RESEARCH INTERNATIONAL

ATTITUDE OF SECONDARY
SCHOOL MATHEMATICS
TEACHERS TOWARDS
INFORMATION COMMUNICATION
TECHNOLOGY (ICT) IN EKITI
STATE; A CASE STUDY OF IKERE
LOCAL GOVERNMENT AREA.

JEJE, O.S., OLAGOKE, M. AND (MRS) AYODELE, O. B.

College of Education, Ikere Ekiti, Department of Mathematics.

# Introduction

Information and communication technology ICT has been recognized by having the potentiality to improve all aspects of people's social, economic, and cultural life.

Hence, the value of ICT in development of modern society cannot be overemphasized. Allahawiah and Tarawneh (2015) explained that ICT is a network which offers a steadily expanding range new services: organizations personnel in the processing of their information and communication needs. Asiyai (2010) stated that ICT refers to as a computer-based facilities used bv organization personnel to record, transmit, generate, retrieve, impart knowledge and process information and communication

# **NIGHTINGALE**

PUBLICATIONS AND RESEARCH INTERNATIONAL

# **Abstract**

*The purpose of this study was* to find out the attitude of secondary school mathematics teacher towards information communication technologies (ICT) in Ekiti state. A total sample of 200 secondary school teachers (male and female) was selected through stratified random sampling from Ikere local government area of Ekiti state. A 20 item questionnaire was developed by the researches on attitude secondary school mathematics teachers towards ICT. The data obtained were analyzed using independent t- test statistics. The result of the study revealed that majority of the teachers had a very poor attitude towards ICT. It was observed that male teachers showed positive attitude while female teachers had a negative attitude towards ICT. The researchers recommended that continuous in-service ICT

IJCER ISSBN: 1969-1889 Vol. 11, NO. 8)

raining be made for teacher in all categories in ekiti state. **Keyword**: Attitude, Secondary School, Teacher, Information, Technology and Communication

eeds. With ICT gaining global acceptance and its integration in every field of endeavor, it is important that concerted effort be made to equip teachers for challenge ahead. Lack of teachers with relevant knowledge and competent on use of ICT determine student level of success or failure. Teachers play a crucial role on the adoption and implementation of ICT in education, however, studies shows that teachers lack the necessary knowledge and skills Yadav (2015). The increasing usage of the internet provides teachers with more information and tools that will support their own ways of understanding Lapite and Adeniyi (2015)

Long (2010) is a combination of technologies made possible by the convergences of computer and telecommunication technologies.

For instance, Peeraer (2010) investigated the factors influencing integration of ICT in teacher education in Vietnam. The author found that the use of ICT applications for teaching practice is limited mostly due to lack of ICT skills and computer confidence. ICT is viewed and defined from different perspective and from different groups. UNESCO, (2002) viewed ICT as a term to describe tools and process used to access, retrieve, store, present and exchange information by electronic and other automated means. Ezenduka and Achufusi (2013), Many teachers of basic, post basic and tertiary levels were trained to be ICT literate so as to be able to implement the newly reformed curriculum which emphasizes use of skills and integration of communication technology in lesson delivery.

Agommuoh (2015) futher observed that the use of IC in teaching science subjects will make learning more real, relevant and experimental as large amount to data and materials on any topic can be brought to the classroom from all over the world thereby, greatly facilitating the acquisition and absorbtion of knowledge and offering students unprecedented opportunities to enhance their learning. Agadi (2014), observed that teachers is an effective and dominating factor among the ones contributing to the educational improvement. The teachers effectiveness depends mainly on the teaches attitude characteristic and the classroom phenomena such as environment

**NIGHTINGALE** 

IJCER 1558N: 1969-1889 Vol. 11, NO. 8) and climate organization and management. Roblyer,et al, (2010) explained that social media are sources of communication among students and lecturers in their respective facilities.

## **Research Questions**

The following research question were asked in other to guide the conduct of the study.

- (i) Is there any gender difference in the attitude of secondary teachers towards ICT?
- (ii) Is there any difference in the attitude towards ICT between mathematics and Arts teachers?

# **Hypothesis**

- (i) There is no significant gender difference in attitude of mathematics teachers towards ICT
- (ii) There is no significant difference in attitude towards ICT between mathematics and Art teachers.

# Methodology

The study adopted a survey approach in which a stratified ransom samples method was used to select the four secondary schools in ikere local government area of ekiti state . The population of the study consist of all the teachers in ekiti state . The sample comprised of 200 teachers (100 male and 100 female ). A total of 200 questionnaires were randomly distributed to the selected participants . All the questionnaires were retuned and formed the basis for statistical analysis .Instrument used was a structured questionnaire developed by the researchers was used . The questionnaire was a 20 items self report inventory on attitude of mathematics teachers towards ICT (AMTTICT). The questionnaire had two sections A and section B. It has a likert type questionnaire on 4 – point scale ranging from Strongly Agree (SA) to strongly Disagree (SD) .

# Validity and Reliability

The researches gave the developed instrument to three experts in Test and Measurement .All the corrections were put in proper shape and corrected before the final print out of the instrument .The reliability of the same





instrument was confirmed by the use of split half method of reliability in which all the scores of the even items and of the odd items were correlated with the use of Pearson Movement Correlation . A reliability of 0.78 was obtained ,hence the instrument was reliable and considered suitable for the research .

#### Results

# **Hypothesis I: Testing**

There will be no significant gender difference in the attitude of mathematics teachers towards ICT

Table I: t-test table showing gender difference in mathematics teacher attitude towards ICT.

Gender	Mean	SD	DF	t-Cal	t - Table
Male	39.14	4.49	198	2.13	0.42
Female	37.45	4.23			

Table I: Shows that male teachers have a higher rating on perception with average perception score of 39.14 while the female had an average score of 37.45. To verify whether the difference is significant or not t-test was employed since the level of the t-cal (2.13) is greater than the value of the t-tab (0.42) the null hypothesis is rejected. This means that there is significant difference in the attitude of male and female mathematics teachers with respect to ICT

## Hypothesis II : Testing

Table 2 : Descriptive statistics of attitude with respect to mathematics and Arts teachers

Department	N	Mean	SD	Standard Mean	Error
Mathematics	93	37.20	3.37	- 34917	
Arts	107	39.24	5.01	-48389	

Table 3: t- test table showing difference in attitude towards ICT between mathematics and Arts teachers.

Variables	Mean	SD	DF	T -cal	T -tab	Remark
Mathematics	37.20	3.36	198	0.56	0.42	Significant
Arts	39.24	5.00				





Since, t-cal (0.56) is greater than t- tab (0.42) it implies that there is a significant different in the attitude of teachers with respect to department, the hypothesis is therefore rejected.

#### **Discussion**

The first hypothesis states that there is no significant gender difference in the attitude of mathematics teachers towards ICT was rejected. This study revealed that there was a high level of lack of interest by the female teachers. They believe they cannot cope with the use of computer. Hence, the findings of the study contradict that of Yusuf and Balogun (2011) who reported that gender has no place in determining the attitude of teachers towards ICT .On the second hypothesis which states that there is no significant difference in attitude towards ICT between mathematics teachers and Arts teachers revealed that there was a significant difference in the attitude towards ICT between mathematics and arts teachres. Regardless of attitude, the level of awareness of ICT of the Arts teachers is very low. This may be because they are not mathematically oriented. The study revealed a non - challant attitude of the Arts teachers towards ICT. This finding is similar to that of Olisame, Odumosu and Esho (2011) on the use of internet for teaching. They found out that mathematics teachers in schools make use of available ICT facilities for example, the use of internet, power point and documentaries to teach mathematics and enhance students learning of mathematics. Contrary to the findings of Etiubon and Etiubon (2012) who found out that scince teachers had poor or negative attitude towards ICT and also lack the basic skill of ICT.

#### Conclusion

This paper concluded that most of the teachers had poor attitude towards ICT. Therefore, teachers needs to be equipped in developing new ideas and concepts to update their knowledge as this will improve their professional skills by attending seminars, conferences, workshop and training.

#### Recommendations

The researchers, therefore, recommends the following based on the findings of the study :

- Workshops, conferences and seminars should be organized periodically for teachers to acquire relevant ICT competencies needed to teach.

NIGHTINGALE
PUBLICATIONS AND RESEARCH INTERNATIONAL

IJCER ISSBN: 1969-1889 Vol. 11, NO. 8)

- Nigerian secondary schools should be equipped with necessary information and communication Technology facilities.
- Teacher training on curricular in Nigeria should include ICT training that may warrants the teachers use modern ICT Instructions in teaching and learning.

#### REFERENCES

- Agommuoh, P.C. (2015): Enhancing teaching of physics through the use of ICT in secondary Schools. In Z.C.Njoku(Ed) 56<sup>th</sup> Annual Conference Proceedings of Science Teachers Association of Nigerian, 274 283 Ibadan, HEBN Publishers PLC.
- Allahawiah, S. and Tarawned, AS.A. (2015): Factors Affecting Information and Communication Technology use by Southern Colleges Teachers in Baiqa Applied University. West East Institute International Academic conference proceeding. Bacelona, Spain. Pp 138 148. www.westeastintitute.com/ep.content/upload/2005/02/sattam Allahawiah.pdf.
- Angadi , G.R.(2014) : International journal of education and psychological Research (IJER.R) 3.(1) , March (2014).
- Asyai ,R. I (2010) :The Role of information and communication technology in the management of secondary education for sustainable development in Deita State , Nigeria . Journal of sociology and education in African . 9 (1) , 157 168.
- Ezeuduka , C.U and Achufusi, J.N (2013) : Level of secondary school biology teachers in ICT literacy and utilization in Anambra State : Implication for MDGS Attainment. Proceeding of the 54<sup>th</sup> Annual conference of STAN 323-330.
- Lapite .A.O. ans Adeniyi ,M. A (2015) : Counselling though the web. Counsellor"s Perspective and usage .In issues in the helping profession for Nigeria counselling (CASSON)
- Longe ,H.O.D .(2010): ICT in the teaching and leatning of STM Being 14<sup>th</sup> Annual Lecture of the Vdogie Ivowi foundation held on Wednesday 8<sup>th</sup> 2010 at NERDC Hostel and conference Center Agidngbi, Ikeja lagos.
- Roblyer, M.D., Mc Daniel, M., Webb, M., Herman, J. and Witty, J.V., (2010): Findings in facebook in Higher Education; A comparison of College Faculty and students uses and perceptions Social

**NIGHTINGALE** 

IJCER 1558N: 1969-1889 Vol. 11, NO. 8) UNESCO(2002): Section two pilot testing performance indicators on ICT for education in Asia – Pacific Retrieverd . <a href="https://www.unescobkk.org/education/ICT/resources.com">www.unescobkk.org/education/ICT/resources.com</a>

Peeraer, L. (2010): Factors influencing integration of ICT in Higher Education in Vietnam, Global Learn, penang: Malaysia publisher: AACE. May 17.

Yadev,R.(2015) Attitude of secondary schools teachers towards the use of information communication Technology in Education .International journal of Education and information Sudies 5(1),31-33.



