



## **Lecturers Proficiency in the Use of Information and Communication Technology in Colleges of Education in Lagos State**

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### **Abstract**

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This study examined the proficiency level of lecturers in the use of Information and Communication Technology (ICT) in College of Education (COE) in Lagos State, Nigeria using the UNESCO competency framework for teachers (Technology Literacy, Knowledge Deepening, and Knowledge Creation). The cross-sectional survey method was adopted for the study. Respondents were 112 lecturers randomly selected from the three purposively selected from ten Colleges of Education in Lagos State, Nigeria. Questionnaire was adapted from Adeyanju (2015). Mean was used to answer the research questions with a benchmark of 2.50. The study found out that the proficiency levels of lecturers are moderate in terms of (Technology Literacy, Knowledge Deepening, and Knowledge Creation). The study concluded that lecturers in colleges of education are developing their proficiency in the use of ICT for instruction ICT. It was recommended that lecturers should be exposed to more training on the use of emerging technologies for instruction regularly to increase their proficiency level.

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**Keywords:** Information and Communication Technology, Proficiency, College of Education

## **Introduction**

During the last two decades higher education institutions have invested heavily in information and communication technology (ICT) which has the potential to transform teaching and learning processes because education policymakers widely accepted that improved access to information and communication technology (ICT) in education can help individuals use in a global economy by creating a skilled work force and facilitating social mobility (United Nations Educational, Scientific and Cultural Organisation, UNESCO, 2014). Globally and in Nigeria, education policymakers have been formalized all-inclusive ICT policies as part of educational renewal and reform at all levels of education. At the international level, policy for integrating ICT for development was first formulated in the Millennium Development Goals (MDGs), which states that in cooperation with the private sector, benefits of new technologies, especially information and communications should be made available (UNESCO, 2008).

UNESCO, (2008) and (2011) concluded that ICT is beyond a mere delivery mechanism but also enhances the pedagogy as it changes the nature of teaching and learning. ICT helps to bring abstract concepts to life using images, sounds, movement, animations and simulations. In any case, a better understanding of ICTs and their impact on student outcomes are priorities in all countries, regardless of level of economic development (UNESCO, 2014). In view of the expression of the National Policy on Education (NPE) (FRN, 2013), tertiary institutions shall contribute to national development through high-level relevant human power training, it is therefore, mandatory that tertiary institutions lecturers must be active participants in this modern Information and Communication Technology (ICT) society (Olafare, 2014). The Federal Government recognized ICT as a strategic imperative for national development. Consequently, various government agencies such as the National Commission for Colleges of Education, National University Commission and Teachers Registration Council of Nigeria have made the

acquisition of basic ICT skills part of the National Minimum Standards for Teacher Education at the NCE and First Degree levels of Education in Nigeria (Njoku, 2006). However, the National Commission for Colleges of Education recognizes lecturers in the colleges of education as key players in developing ICT skills in pre-service teachers. Hence, literacy and proficiency with a high level of usage of ICT have been made compulsory for all lecturers in Nigerian Colleges of Education since the 2004/2005 academic session. Based on the above this study examines the lecturers' proficiency in the use of ICT in Colleges of Education in Lagos State using the identified competency framework for teachers by UNESCO in 2011 as Technology Literacy, Knowledge Deepening, and Knowledge Creation.

### **Research Questions**

1. What is the level of proficiency (technology literacy) of lecturers in Colleges of Education in Lagos State in the use of ICT?
2. What is the level of proficiency (knowledge deepening) of lecturers in Colleges of Education in Lagos State in the use of ICT?
3. What is the level of proficiency (knowledge creation) of lecturers in Colleges of Education in Lagos State in the use of ICT?

### **Research Methods**

The study was a descriptive research using the cross-sectional survey type. The population for the study was lecturers in Colleges of Education in Lagos State, Nigeria.

This study covered ten Federal, State and private Colleges of Education in Lagos State, Nigeria. The Colleges of Education purposively selected include Federal College of Education, Akoka, Adeniran Ogunsanya College of Education and Saint Augustine College of Education. In all, a total of 112 lecturers were randomly selected for the study. The research instrument was adapted from Adeyanju (2015) for the purpose of this study. Data collected were analysed using SPSS™ 20 for Windows. The dependent variable of concern was the Colleges of Education lecturers' proficiency in the use of

ICT for instruction. Questionnaire was used to collect data. Research questions were answered using mean. A benchmark of 2.50 was used since the instrument was rated highly proficient (4), proficient (3), moderately proficient (2) and not proficient (1).

## Results

**Table 1**

*COE Lecturers' Proficiency in ICT (Technology Literacy)*

S/N	Proficiency in ICT(Technology Literacy)	$\bar{x}$
1.	Create documents of various types and save in desired location	3.1
2.	Retrieve an existing document from saved location	3.21
3.	Select, copy and paste text in a document or desire location	3.22
4.	Print a document	2.71
5.	Name, rename, copy and delete files	2.92
6.	Use word processing like MS Word	3.13
7.	Use presentations like PowerPoint	2.71
8.	Use spreadsheets like Excel	2.73
9.	Use a PDF reader like Acrobat Reader	2.64
10.	Use compression software (Winzip)	3.10
<b>Average mean</b>		<b>2.95</b>

The result in Table 1 reveals that the items on the instrument had mean scores of 3.10, 3.21, 3.22, 2.71, 2.92, 3.13, 2.71, 2.73, 2.64 and 3.10 respectively. However, the grand mean score for COE lecturers' proficiency (technology

literacy) in the use of ICT was found to be 2.95. This implies that COE lecturers' proficiency (technology literacy) in the use of ICT is moderate using a benchmark of 2.50

**Table 2**

*COE Lecturers' Proficiency in ICT (Knowledge Deepening)*

S/N	Proficiency in ICT (Knowledge Deepening)	$\bar{x}$
1.	I can use ICT to teach students in the classroom	2.74
2.	I can use ICT to help students find appropriate instructional paths	2.35
3.	I can use ICT to help students to evaluate their own progress.	2.64
4.	I can use ICT to students' abilities to undertake independent learning.	3.31
5.	I can use ICT to care for individual differences of the students.	2.51
6.	I can use ICT to keep track of all students' activities and progress.	2.62
7.	I can use ICT to help students learn to search for information, process data, and present information.	2.11
8.	I can use ICT to ensure that students learn at their own pace.	3.13
9.	I can use ICT to develop professionally by searching for necessary information related to my subject.	2.89
10.	I can use ICT to create excited and conducive learning environment.	3.12
<b>Average Mean</b>		<b>2.74</b>

The result in Table 2 reveals that the items on the instrument had mean scores of 2.74, 2.35, 2.64, 3.31, 2.51, 2.62, 2.11, 3.13, 3.12 and 2.89 respectively. However, the grand mean score for COE lecturers' proficiency (Knowledge

Deepening) in the use of ICT was found to be 2.95. This implies that COE lecturers' proficiency (Knowledge Deepening) in the use of ICT is moderate using a benchmark of 2.50

**Table 3**

*COE Lecturers' Proficiency' in the Use of ICT (Knowledge Creation)*

S/N	Proficiency in ICT (Knowledge Creation): I use ICT to:	$\bar{x}$
1.	Teaching Students how to use and reason for using the technology	2.55
2.	Develop students' abilities to undertake independent learning	3.12
3.	Help students learn to search for information, process data, and present information.	2.14
4.	Ensure students use the web safely.	3.21
5.	Develop certain skills in students	2.56
6.	Expose students to diverse learning styles	2.82
7.	Help students with special needs to learn	2.78
8.	Support students in cooperation and teamwork.	2.58
9.	Blend learning and instruction	2.44
10.	Support problem-based or case-based learning	2.56
<b>Grand mean (<math>\bar{x}</math>)</b>		<b>2.68</b>

The grand mean score for COE lecturers' proficiency (Knowledge Creation) in the use of ICT was found to be 2.70. This implies that COE lecturers'

proficiency (Knowledge Creation) in the use of ICT is moderate using a benchmark of 2.50

## **Discussion of Findings**

The result of the study revealed that COE lecturers' are moderately proficient in the use of ICT for instruction with respect to technology literacy, knowledge deepening and knowledge creation. This finding is not in agreement with Adeyanju (2015) who reported that there was a low level of skillfulness in the use of ICT among lecturers. The results of the findings also agree with Beggs (2000) who reported that teachers should develop certain basic skills, such that will help them maximize the use of ICT effectively as a teaching resources. The findings of Chukwu, Ajere and Afolabi (2003) who reported that teachers that made use of ICT facilities were computer literates also agreed with the findings of this study. However, ICT uses by lecturers depends greatly on their proficiency. In a bid to achieve a high level of proficiency in ICT, training is inevitable.

## **Conclusion**

From the findings, it can be deduced that lecturers in colleges of education are developing their proficiency in the use of ICT for instruction. This showed that there is a need to facilitate the use of ICT in teaching and learning and the need for teachers to develop in their students a high level of proficiency to achieve the desired goals and for sustainable development goals.

## **Recommendations**

Based on the findings and conclusions drawn in this study, it was recommended that lecturers should be exposed to more training on the use of emerging technologies for instruction regularly to increase their proficiency level.

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