
**VARIABLES INFLUENCE ON COMPUTER SCIENCE LECTURERS ATTITUDE AND
THE APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY
IN FEDERAL UNIVERSITIES IN SOUTH – SOUTH NIGERIA.**

BY

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ABSTRACT

The main purpose of the study was to determine variables influence on Computer Science lecturers' attitude and the application of ICT resources in Federal Universities in South-South Nigeria. Specifically, the study was designed to determine the difference in lecturers' application of ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria based on years of experience and marital status. To achieve this purpose, two specific purposes, two research questions and two null hypotheses were formulated and tested at 0.05 level of significance. The ex-post facto research design was used in the study and it was carried out in South-South Nigeria. The population of the study consisted of 225 Computer Science lecturers from all the six federal Universities in South-South, Nigeria. The sample of the study comprised 142 Computer Science lecturers. The sample size was determined using Krejice and Morgan's (1970) sampling model while the sample was selected using a combination of proportionate sampling and random sampling techniques. A researcher developed instrument known as "Variable Influence on Computer Science Lecturer's Attitude and the Application of Information and Communication Technology Resource Tools Questionnaire" (VIOCSLAICTRT-Q) was used for data collection. The data obtained were subjected to Cronbach Alpha reliability statistics using the Spilt-half method. The internal consistency reliability coefficient obtained was 0.90. One hundred and forty (142) out of One hundred and forty two (142) copies of the questionnaire administered were correctly completed and returned. This represented a 98.59 % return rate. Mean was used to answer the research questions, while Multivariate Analysis of Variance (MANOVA) were used to test the null hypotheses at the 0.05 level of significance. The analysis of the responses revealed that the mean responses of Computer Science lecturers on their application of ICT resource tools in teaching was different when they are classified based on their years of experience. The management of the federal universities in South-south Nigeria in collaboration with the National Universities Commission (NUC) should ensure that only lecturers with 21 years of experience and above should handle core computer science courses.

KEYWORDS: ICT Resources Tools, Computer Science Lecturers Attitudes

INTRODUCTION

The importance of Information and Communication Technology (ICT) in schools cannot be overemphasized; hence, the vision of the Federal Ministry of Education as captured in its National ICT Policy of 2006 is as follows:

To facilitate ICT as a universal tool for education and training. In order to achieve this vision every educational institution, teachers, learners and respective community should be equipped with appropriate ICT infrastructure, competencies and policies for usage and progress. It calls for knowledge-based economy. It also calls for transforming teaching and learning to incorporate new pedagogies that are appropriate for the 21st century. The M.O.E's mission is to facilitate effective use of ICT to improve access, learning and administration in delivering educational programmes and services. The principal objective will be to integrate ICT in the delivery of education and training curricula (p. 2).

To facilitate the achievement of this vision, the Federal Government of Nigeria has recommended the integration of ICT into all levels of the country's education system, including the universities. University education is part of the tertiary educational system in Nigeria. The goals of the tertiary educational system in Nigeria as stipulated in the National Policy on Education, include, among others, to contribute to national development through high level manpower training; to provide accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interests of all Nigerians; and to reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market (Federal Republic of Nigeria, FRN, 2013). Akpan (2014) stated that university education in Nigeria is expected to contribute to national development by intensifying and diversifying its programmes for the development of high manpower needs for the various sectors of the country's economy. One of the courses offered in Nigerian universities, which is very relevant to this study is Computer Science.

Computer Science deals with the study of how computers and computer systems work, and how they are constructed and programmed as well as the foundations of information and computation, in both artificial and natural information processing systems (The Computing at School Working Group, 2012). According to Boston University (2003), Computer Science is the systematic study of the feasibility, structure, expression, and mechanization of the methodical processes (or algorithms) that underlie the acquisition, representation, processing, storage, communication of, and access to information, whether such information is encoded in bits and bytes in a computer memory or transcribed in genes and protein structures in a human cell. Computer Science Education is the study of computers and algorithmic processes, including their principles, hardware, and software designs, applications and impact on the society (Essien and Frank, 2018).

There is need for effective utilisation of ICT resources in the teaching of Computer Science courses in Nigerian universities. According to Akpan (2014), university lecturers have various tasks to accomplish and these range from teaching, research and publications, marking of tests and examinations, supervising students' research activities, supporting students through advisory roles, attending conferences and providing community services.

In order for them to be effective and efficient, they need to acquire an appreciable level of ICT competence in order to enable them meet up with the demands of their job. The author further stressed that the use of ICT resources would enable teachers and lecturers to

communicate and collaborate with other teachers and this will ultimately facilitate their effective job performance.

Despite increase in computer access and technology training, ICT resources are not being effectively used by teachers and students to support the kind of instruction believed to be the most powerful. Many studies such as Alazam, Bakar, Hanizah and Asimiranis (2012), Tweed (2013); Mustafa (2014); Aramide, Ladipo and Adebayo (2015) and Mahdi, Laafon and Janati-Idris (2015) have identified demographic variables as one of the important factors affecting effective integration of ICTs in teaching by teachers and lecturers. According to Aramide, Ladipo and Adebayo (2015), among the demographic variables which have often been cited as having major influence or predicting the use of ICT resources by individual teachers include: gender; income; level of education, skills and age. In this study, demographic variables considered include educational qualification, age, gender, years of service or experience and marital status.

Moreover, on the relationship between years of experience of teachers and ICT use, Mueller, Wood, Willoughby, Ross and Specht (2016) found that there was no significant relationship between teaching experience of teachers and their use of ICT in teaching. However, Inan and Lowther (2009) made a different finding which revealed that years of teaching experiences affect teachers' use of computer in a negative manner. Similarly, Kalogiannakis (2008) in a study reported that teachers' years of work experiences influence the teachers' ICT use in teaching.

Furthermore, a study by Chauhan (2016) on the impact of qualification and marital status on the professional attitude of women teachers revealed that significant difference was found between married and unmarried women teachers in relation to their professional attitude. Specifically, the unmarried women teachers were found to have favourable professional attitude than married women teachers. This favourable or unfavourable professional attitude may include their application of ICT resource tools in teaching.

All these studies and several others are pointers to the fact that teachers' demographic characteristics might influence their utilization of ICT resources in teaching different subjects at various levels of education. However, in view of the contradictory findings in respect of the influence of some of the teachers' demographic characteristics on their utilization of ICT resources in teaching, there is need for more investigation with respect to Computer Science lecturers in federal Universities. It is therefore based on the foregoing background that the present study becomes necessary in order to determine the influence of lecturers' demographic characteristics on the application of various ICT resources in teaching Computer Science in federal Universities in South-South Nigeria.

Statement of the Problem

The use of ICT in the teaching of Computer Science courses in federal universities in South-South Nigeria seem to be influenced by variables such as years of service or experience and marital status. Moreover, some of the results are conflicting. Furthermore, there is lack of research that combines all these variables influences into one study to see how they influence teachers and lecturers ICT usage in the teaching of Computer Science in federal universities in South-South Nigeria. Therefore, the problem of this study was to determine years of experience and marital status on the application of various ICT resources in the teaching of Computer Science in federal universities in South-South Nigeria.

Purpose of the Study

The main purpose of the study was to determine some variables influence on Computer Science lecturers' attitude on their application of various ICT resources in Federal Universities in South-South Nigeria. Specifically, the study was designed to determine:

1. The influence of years of experience on lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria.
2. The influence of marital status on lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria.

Research Questions

The following research questions were raised to guide the study:

1. How does years of experience influence the application of various ICT resources in teaching by Computer Science lecturers' in Federal Universities in South-South Nigeria?
2. How does marital status influence the application of various ICT resources in teaching by Computer Science lecturers' in Federal Universities in South-South Nigeria?

Research Hypotheses

In order to guide the study, the following null hypotheses were postulated and tested at 0.05 level of significance.

HO₄: There is no significant influence of years of service on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria.

HO₅: There is no significant influence of marital status on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria.

Area of the Study

The study was conducted in the South-South geopolitical zone of Nigeria. The South-South zone is made up of six states namely Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers states. There are six federal universities in the South-South geopolitical zone of Nigeria. These are University of Calabar, Calabar; University of Uyo, Uyo; University of Port Harcourt, Port Harcourt; University of Benin, Benin City and Federal University, Otueke, Bayelsa State. There are also six state universities in the zone. These include Rivers State University, Port Harcourt; Delta State University, Abraka; Akwa Ibom State University, Ikot Akpaden; Cross River State University of Technology, Calabar; Niger Delta University, Wilberforce Island, Bayelsa State and [Ambrose Alli University](#), Ekpoma, [Edo](#) state.

Population of the Study

The target population of the study consisted of 225 Computer Science lecturers from all the six federal Universities in South-South, Nigeria (Field Survey, 2018). The population and sample distribution is below.

Distribution of the Population And Sample of the Study According to the Federal Universities

S/n	Name of University	No of Computer Science Lecturers	Sample Selected
1	University of Uyo	21	13
2	University of PH	76	48
3	Fed University, Otueke	38	24
4	University of Benin	41	26
5	University of Calabar	37	23
6	Fed University of Petroleum, Delta State	12	8
7	TOTAL	225	142

Sample and Sampling Technique

The sample of the study comprised 142 Computer Science lecturers. The sample size was determined using Krejcie and Morgan's (1970) sampling model which is shown in Appendix 11. The sample was selected using a combination of random sampling and proportionate sampling techniques. The sample size of 142 respondents was broken down into proportionate sample in the six federal universities using Bourley's proportional allocation formula. After the proportionate sample for each university was computed, the random sampling technique (balloting) was used to select the required sample from each of the six universities.

Instrumentation

A researcher developed instrument known as "Variable Influence on Computer Science Lecturer's Attitude and the Application of Information and Communication Technology Resource Tools Questionnaire" (VIOCSLAICTRT-Q)" was used for data collection. The instrument was divided into two sections: Section A sought to elicit general information on the personal data of the respondents. Section B contained items on ICT resources.

Validation of the Instrument

The type of validation done in this study was face validation which is concerned with the extent to which a test is subjectively viewed as covering the concept it purports to measure. It refers to the transparency or relevance of a test as it appears to test participants. Accordingly, the instrument for the study was given to three validates who comprised two experts in the Department of Vocational Education and one expert in Measurement and Evaluation unit of the Department of Educational foundations, Guidance and Counseling for vetting. Each expert was required to evaluate whether or not the individual items in the instrument is relevant for answering the research questions and testing the null hypotheses. They were also requested to assess whether the instrument covers all the main variables in the study. The modifications and corrections suggested by the validates were adopted and used in updating the instrument to ensure the validity of the instrument for the study.

Reliability of the Instrument

The validated instrument was administered on 20 Computer Science lecturers from federal Universities in South-South Nigeria that were not used in the main study. The data obtained were subjected to Cronbach Alpha reliability statistics. The internal consistency reliability coefficient of the whole instrument was 0.90 while that of the various sections were as

follows: general purpose applications (0.70); general purpose devices (0.82); video websites (0.76); software (0.78); and chatrooms (0.72).

Method of Data Collection

The researcher politely sought for and obtained permission from the Heads of Computer Science Departments in the sampled federal Universities in South-South Nigeria before administering the questionnaire to the lecturers. The questionnaire administration process was successfully handled by the researcher with the help of three research assistants who were among the Computer Science lecturers in the sampled universities in the zone. 140 out of 142 copies of the questionnaire administered were correctly completed and returned. This represented a 98.59 % return rate.

Method of Data Analysis

Mean and standard deviation (SD) were used to answer the research questions, while the Multivariate Analysis of Variance (MANOVA) was used to test the null hypotheses at the 0.05 level of significance. The purpose of using this was to determine whether the independent sub-variables of years of experience and marital status significantly influence the dependent variables (application of the various ICT resources) by Computer Science lecturers in teaching Computer science in federal Universities in South-South Nigeria.

Results and Discussion

The results are presented under their sub-headings that correspond to their research questions and research hypotheses of the study.

Research Question 1

How do years of experience influence the application of ICT resources in teaching by Computer Science lecturers' in Federal Universities in South-South Nigeria?

Table 1: Mean responses on the influence of years of experience on computer science lecturers application of ICT resources in teaching (N = 140)

S/n	ICT Resources	1-10 yrs	11-20 yrs	21 yrs +
		N = 66 \bar{X}	N = 46 \bar{X}	N = 28 \bar{X}
1	General purpose applications	3.41	3.43	3.54
2	General purpose devices	3.41	3.47	3.56
3	Use of Video websites in teaching	3.22	3.33	3.53
4	Use of software	3.26	3.31	3.31
5	Use of Chat rooms in teaching	3.38	3.06	3.46
	Cluster Mean	3.34	3.32	3.48

Note: Mean cutoff point 2.5

Table 1 indicates the summary of the mean responses on the influence of years of experience on Computer Science lecturers' application of ICT resources in teaching. However, there were differences in the application among lecturers with 1-10 years, 11-20 years and 21 years' experience and above with cluster mean response of 3.34, 3.32 and 3.48 respectively. Based on the cluster mean, the five categories of ICT resources have mean responses above the cutoff point of 2.50 indicating that the Computer Science lecturers applied the five categories of ICT resources in teaching. This result further indicates that lecturers with 21 years of experience and above apply ICT resources most followed by those with 1-10 years of experience while those with 11-20 years of experience are the least users of ICT resources in the teaching of Computer Science in federal universities in South-South Nigeria.

Research Question 2

How does marital status influence the application of ICT resources in teaching by Computer Science lecturers' in Federal Universities in South-South Nigeria?

Table 2: Mean Responses on the influence of Marital Status on Computer Science Lecturers application of ICT resources in teaching (N = 140)

S/N	ICT Resources Divorced/Separated	Single	Married	
		N = 55 \bar{X}	N = 65 \bar{X}	N = 20 \bar{X}
1	General purpose applications	3.42	3.45	3.50
2	General purpose devices	3.48	3.46	3.39
3	Use of Video websites in teaching	3.27	3.36	3.36
4	Use of software	3.34	3.30	3.09
5	Use of Chat rooms in teaching	3.19	3.33	3.53
	Cluster mean	3.34	3.38	3.37

Note: Mean cutoff point 2.5

Table 2 indicates the summary of the mean responses on the influence of marital status on Computer Science lecturers' application of various ICT resources in teaching. However, there were differences in the application among single, married and divorced/separated with cluster mean response of 3.34, 3.38 and 3.37 respectively. Based on the cluster mean the five categories of ICT resources exceed the cutoff point of 2.50 indicating that the Computer Science lecturers applied all the five categories of ICT resources in their teaching. This result further indicates that lecturers who are married apply ICT resources most followed by divorced/separated lecturers while single lecturers are the least users of ICT resources in the teaching of Computer Science in federal Universities in South-South Nigeria.

Hypothesis 1

There is no significant influence of years of experience on Computer Science lecturer's application of various ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria.

Table 3: Multivariate Analysis of Variance (MANOVA) test of significant influence of years of experience on Computer Science lecturers' application of Various ICT resources in teaching

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	p-value	Decision
EXPERIENCE	General purpose applications	.349	2	.174	.757	.472	NS
	General purpose devices	.976	2	.488	2.770	.067	NS
	Use of Video websites	.791	2	.395	3.067	.051	NS
	Use of software	.046	2	.023	.275	.760	NS
	Use of Chat rooms	.463	2	.232	1.682	.191	NS
	OVERALL		.022	2	.011	.232	.794

*NS= Not significant; S = Significant at 0.05 level of significance.

Table 3 reveals the result of the multivariate analysis of variance (MANOVA) influence of years of experience on Computer Science lecturer's application of various ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria. The p-values of all the five items (.472, .067, .051, .760 and .191) as well as the overall p-value (.794) is greater than (0.05) ($p > 0.05$). On this basis, the null hypothesis is upheld implying that there is no significant influence of years of experience on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South, Nigeria.

Hypothesis 2

There is no significant influence of marital status on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South, Nigeria.

Table 4: Multivariate analysis of variance (MANOVA) test of significant influence of marital status on computer science lecturers' application of various ICT resources in teaching

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	p-value	Decision
MARITAL	General purpose applications	.288	2	.144	.625	.537	NS
	General purpose devices	1.592	2	.796	4.518	.013	S
	Use of Video websites	1.677	2	.839	6.507	.002	S
	Use of software	.737	2	.368	4.400	.015	S
	Use of Chat rooms	1.007	2	.503	3.657	.029	S
OVERALL		.430	2	.215	4.474	.014	S

*NS= Not significant; S = Significant at 0.05 level of significance.

Table 4 shows the result of the multivariate analysis of variance on the influence of marital status on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South, Nigeria. The p-value (.013, .002, .015, .029) of four out of the five categories of ICT resources including the overall p-value (.014) are less than (0.05) ($p < 0.05$). Since the overall the p-value of 0.014 which is less than 0.05, the null hypothesis is rejected. It can therefore be concluded that there is a significant influence of marital status on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South, Nigeria.

Table 5: Multiple comparison of the mean influence of lecturer's application of four ICT resources based on their marital status Scheffe

Dependent Variable	(I) MARITAL	(J) MARITAL	Mean Difference (I-J)	Std. Error	Sig.
GEN PURPOSE DEVICE	SINGLE	MARRIED	.0260	.07636	.944
		DIVORCED	.0937	.10693	.682
	MARRIED	SINGLE	-.0260	.07636	.944
		DIVORCED	.0677	.10958	.827
	DIVORCED	SINGLE	-.0937	.10693	.682
		MARRIED	-.0677	.10958	.827
VIDEO WEB	SINGLE	MARRIED	-.0905	.06532	.386
		DIVORCED	-.0869	.09147	.638
	MARRIED	SINGLE	.0905	.06532	.386
		DIVORCED	.0036	.09374	.999
	DIVORCED	SINGLE	.0869	.09147	.638
		MARRIED	-.0036	.09374	.999
SOFTWARE	SINGLE	MARRIED	.0335	.05264	.817
		DIVORCED	.2490(*)	.07372	.004*
	MARRIED	SINGLE	-.0335	.05264	.817
		DIVORCED	.2156(*)	.07554	.020*
	DIVORCED	SINGLE	-.2490(*)	.07372	.004*
		MARRIED	-.2156(*)	.07554	.020*
CHATROOM	SINGLE	MARRIED	-.1445	.06751	.106
		DIVORCED	-.3428(*)	.09454	.002*
	MARRIED	SINGLE	.1445	.06751	.106
		DIVORCED	-.1983	.09689	.128
	DIVORCED	SINGLE	.3428(*)	.09454	.002*
		MARRIED	.1983	.09689	.128

* The mean difference is significant at the .05 level.

Table 5 shows the summary of the post hoc multiple comparison of the mean difference of influence of marital status on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South, Nigeria. The result shows that on the usage of video-web fall on married lecturers with mean score of .0905(*), the use of software fall on single lecturers with mean score of .2490(*) while the use of chat room fall on single lecturers with mean score of .2490(*). This result implies that the significant influence of marital status on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South, Nigeria can be attributed to married and single lecturers on the use of video web, software and chat room respectively.

Findings of the Study

Based on the data collected and analyzed in the study, the following findings were made with respect to the research questions and hypotheses that guided the study:

1. Lecturers with 21 years of experience and above apply ICT resources most followed by those with 1-10 years of experience while those with 11-20 years of experience are the least users of ICT resources in the teaching of Computer Science in federal universities in South-South Nigeria.
2. Lecturers who are married apply ICT resources most followed by divorced/separated lecturers while single lecturers are the least users of ICT resources in the teaching of Computer Science in federal universities in South-South Nigeria.
3. There is no significant influence in Computer Science lecturers' application of ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria, based on their years of experience.
4. There is significant influence in Computer Science lecturers' application of ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria, based on their marital status.

Discussion of Findings

In this section, the findings of this study are discussed. The discussion is organized under sub-headings that correspond to the major variables in the research questions and hypotheses of the study.

Influence of Lecturers Years of Experience on Their Application of Various ICT Resource Tools in Teaching Computer Science Courses in Federal Universities in South-South, Nigeria

The analysis of the responses to research question 4 which is presented in Table 1 revealed that the mean responses of Computer Science lecturers on their application of ICT resource tools in teaching was different when they are classified based on their years of experience. It was found that Computer Science lecturers with 21 years of experience and above apply ICT resources most followed by those with 1-10 years of experience while those with 11-20 years of experience are the least users of ICT resources in the teaching of Computer Science in federal universities in South-South Nigeria. Testing of the corresponding null hypothesis 4 which is presented in Table 4.9 revealed that the null hypothesis was upheld. This implies that there was no significant influence in Computer Science lecturers' application of ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria, based on their years of experience. In other words, Computer science lecturers' years of experience does not significantly influence their application of ICT resource tools in the teaching of Computer Science in Federal Universities in South-South Nigeria.

The finding of the present study that years of experience does not significantly influence Computer science lecturers' application of ICT resource tools in the teaching of Computer Science in Federal Universities in South-South Nigeria supports that of Mueller, Wood, Willoughby, Ross and Specht (2008) who found that there was no significant relationship between teaching experience of teachers and their use of ICT in teaching. The finding however contradicts that of In an and Lowther (2009) who made a different finding that years of teaching experiences affect teachers' use of computer in a negative manner. The present finding also

contradict that of Kalogiannakis (2008) who reported that teachers' years of working experiences influence the teachers' ICT use in teaching.

Influence of Lecturers Marital Status on Their Application of Various ICT Resources Tools in Teaching Computer Science Courses in Federal Universities in South-South, Nigeria.

The result of the analysis of the responses to research question 2 presented in Table 2 revealed that there was a wide difference in the mean responses of Computer Science lecturers on their Application of ICT resource tools in teaching based on their marital status. The finding indicated that Computer Science lecturers who are married apply ICT resources most followed by divorced/separated lecturers while single lecturers are the least users of ICT resources in the teaching of Computer Science in federal universities in South-South Nigeria. Testing of the corresponding null hypothesis 5 presented in Table 3 revealed that the null hypothesis was upheld. This implies that there was significant influence in Computer Science lecturers' application of ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria, based on their marital status. In other words, Computer science lecturers' marital status does significantly influence their application of ICT resource tools in the teaching of Computer Science in Federal Universities in South-South Nigeria.

The finding that Computer Science lecturers who are married apply ICT resources in the teaching of Computer Science in federal universities in South-South Nigeria more than divorce/separated and single lecturers could be explained by the fact that the married lecturers may not be pre-occupied with trying to settle down hence, they may have more time to apply ICT resources in their teaching of Computer Science more than the married and single lecturers. This finding contradicts that of Chauhan (2016) who investigated the impact of marital status on the professional attitude of women teachers and found that significant difference existed between married and unmarried women teachers in relation to their professional attitude. Chauhan (2016) specifically reported that the unmarried women teachers were found to have favourable professional attitude than married women teachers. By implication, this favourable professional attitude might also include their application of ICT resource tools in teaching.

Conclusions

Based on the findings of the research work, it is concluded that there is significant influence of years of experience on Computer Science lecturer's application of various ICT resources in teaching Computer Science in Federal Universities in South-South Nigeria. Also, there is significant influence of marital status on Computer Science lecturers' application of various ICT resources in teaching Computer Science in Federal Universities in South-South, Nigeria.

Recommendations

The following recommendations were made based on the findings of this study

1. The management of the federal universities in South-south Nigeria in collaboration with the National Universities Commission (NUC) should ensure that only lecturers with 21 years of experience and above should handle core computer science courses in federal universities in South-South, Nigeria
2. The management of the federal universities in South-south Nigeria in collaboration with the National Universities Commission (NUC) should ensure that more married persons are employed to teach Computer Science courses in universities in South-South, Nigeria since they apply ICT resources more than divorce/separated and single lecturers.

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