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RELATIONSHIP BETWEEN INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS AND EMPLOYABILITY SKILLS OF POLYTECHNIC STUDENTS IN KWARA STATE

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Abstract

The need for Information and Communication Technology skills by graduates of Nigerian polytechnics as a prerequisite towards securing job in organizations these days cannot be over-emphasized. It is against this background that this paper investigated information and communication technology skills and graduate employability of polytechnics students in kwara state.

The study was a descriptive survey. The study population comprised all the two polytechnics in kwara state. Purposive sampling technique was used to select the state owned polytechnic. Out of this population, the same sampling technique was used to select HND II

final year students. Thereafter, random sampling technique was used to select 120 HND II students. The instrument used for the study was questionnaire. Responses were however received from 120 respondents.

It was revealed from the study that ICT facilities like computers, laptops and flash drives were ICT facilities available while printers, scanners and compact discs were ICT facilities not available in the polytechnic. Findings further revealed that majority of the respondents make use of ICT facilities every day. Findings also showed that graduates who possess ICT skills will first be employed in labour market than graduates without ICT skills.

Based on the findings of the study, it was recommended among others that: polytechnic graduates should endeavor to get ICT facilities such as printers and scanners since they are likely to make use of them while in employment. Also, polytechnic graduates that have never used ICT facilities should be encouraged learning how to make use of them as they are necessary in gaining employment after graduation.

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Introduction

The need for the possession of skills of Information and Communication Technology (ICT) in social organizations cannot be overemphasized. In Nigeria today, more than ever before, effective information and communication technology skills is of paramount importance to the graduates of Nigeria higher institutions for them to be fully fitted into the world of works both in public or private sector of the economy. Labour market is a place where buyers and sellers of labour are in close contact during which the wages and other conditions of service are determined and agreed upon (Ande, 2005). The labour markets in this case are those organizations that employ higher institution graduates as their labour force. The products of these higher institutions will only fit into the labour market if they possess the ICT skills demanded from them by employers of labour for effective running of their organizations. Graduates of higher institutions in Nigeria are known to lack relevant ICT skills in their field of endeavours.

The increasing demand for skilled middle level manpower in Nigerian emerging market economy highlights the developmental roles of polytechnic education. Polytechnic refers to any non-university tertiary institution in Nigeria offering varieties of technical, technological and business diploma programmes at the National Diploma (ND), Higher National Diploma (HND) and post-HND levels that qualify holders for registration in their professional fields (NBTE, 2002). Polytechnics are the technological institutions at the tertiary level of education in Nigeria.

It therefore follows that the skills possessed by the products of our higher institutions are at variance with that required by the labour market. The poor employable skills possessed by our higher institution products have long been recognized. Graduate employability skills are set of personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations (Yorke, 2008). Employers nowadays tend to recruit graduates with ICT skills

and competencies. Thus to face the 21st century challenges of increased competition in work environments, most employers today need applicants with some ICT skills. This, therefore, heightened the expectations of employers of labour in Nigeria with a demand for work ready graduates who have intellectual capacity and are also equipped with ICT skills.

Despite the importance of technological skills on employability of fresh graduates in Nigerian labour market, it is unfortunate that responses of employers of labour on competencies on the use of modern technology by recent graduates reveal that these skills are lacking. Corroborating this fact, Williams (2003) reported that graduates are deficient in transferable skills required of the workforce in the era of modern technology. Tymon (2011) added that employers view that graduates are not yet ready to enter and face the complexities and challenges of the world of work in the era of modern technology. To help students, many higher institutions have reviewed their curricula so as to equip students with more than just academic skills (Abdul Rahim, 2000). This situation prompted the researchers to investigate the relationship between ICT skills and graduate employability of Polytechnics students in Kwara State.

Literature Review

Several authors in Nigeria such as Adeyemo, Ogunleye, Oke and Adenle (2010), Odufowokan (2010), Akuegwu (2011), Udofia. Ekpo, Nsa & Akpan (2012) and Adamu and Kabir (2013) opined that basic ICT skills are necessary for getting, keeping, and doing well on a job. A study on Higher Institution Students' Access to Information and Communications Technology in Nigeria: Management Imperatives for Labour Market Preparations was conducted by Akuegwu (2011) in Cross River State of Nigeria. The survey designed study had three hypotheses which guided the investigation. Findings from Akuegwu's study revealed that higher institution students' access to ICT tools is significantly low; higher institution students who have access to ICT tools had better preparations for labour market than their counterparts who have not and there is significant influence of

higher institution students' level of access to ICT on their labour market preparation.

A survey on the factors determining the employability of science and technology graduates of polytechnics and universities in the Nigerian labour market was conducted by Adeyemo, Ogunleye, Oke and Adenle (2010). The survey method was used for the study. The result of their study shows a mismatch between university outputs and labour market demands.

A study on the Assessment of Views of Business Education Graduates on the Effect of Technological Advancement on their Employability in Nigeria Labour Market was carried out by

Adamu and Kabir (2013). Descriptive survey design method was adopted for the study. Their study revealed that business education curriculum contents in Nigeria do not equip students with generic skills required for their employability in Nigerian labour market in the present advanced technological era.

Udofia, Ekpo, Nsa and Akpan (2012) carried out a research titled "Instructional Variables And Students' Acquisition of Employable Skills In Vocational education in Nigerian Technical Colleges". The study adopted a correlational survey design. The result of their study indicated that there was significant relationship between teacher quality and students' acquisition of employable skills. The researchers recommended that modern technical equipment, tools, machines and instructional materials should be made available for students' practical lessons in Technical Colleges throughout the country. Odufowokan (2010) conducted a study on Information and Communication Technology (ICT) and Graduate Unemployment in Nigeria: The 21st Century Challenges. The study investigated the relationship between Information and Communication Technology (ICT) and graduate and non-graduate unemployment in Ogun-State, Nigeria. The study adopted a descriptive survey. The findings from Odufowokan (2010) showed that ICT played significant role in solving unemployment problems. Based on the findings, it was recommended in his study that ICT should either be hired or procured adequately to

meet the search and challenges of unemployment in the 21st century in Nigeria.

Statement of the Problem

Presently, the world is experiencing changes owing to advancement in information and communication technology (ICT) in various fields of human endeavors. It therefore becomes imperative for graduates of polytechnics to posses adequate skills in the use of ICT if they are to meet up in the labour market. Odufowokan (2010) conducted a study on Information and Communication Technology (ICT) and Graduate Unemployment in Nigeria. Akuegwu (2011) carried out a study on Higher Institution Students' Access to Information and Communications Technology in Nigeria: Management Imperatives for Labour Market Preparations in Cross River State of Nigeria. Adamu and Kabir (2013) conducted a study on the assessment of views of business education graduates on the effect of technological advancement on their employability in Nigeria labour market. It is a fact that there are series of related studies on employability but it appears that there is a dearth of research on ICT skills and graduate employability among graduates of Nigerian polytechnics. This is the gap which this study is set out to fill.

Research Design

The descriptive survey method was considered as the appropriate design because the study is directed towards people, their opinions, attitude and behaviors. The area covered by the study is Polytechnics in Kwara State.

Research Questions

The following research questions were formulated for the study:

- What are the ICT facilities available that could aid graduate employability of Polytechnics students in Kwara State?
- What is the extent of undergraduate's use of ICT facilities?
- What role does ICT skills played in graduate employability among polytechnics students in Kwara State.?

Research Hypothesis

Ho1: There is no significance difference between polytechnic graduates who poses ICT skills and those who do not in terms of employability.

Population of the Study

The population of the study comprises all the two polytechnics in Kwara State. Purposive sampling technique was used to select the state owned polytechnic. Out of this population, the same sampling technique was used to select HND II final year students. Thereafter, random sampling technique was used to select 120 HND II students. The final year students of the Institutes of Technology of kwara State Polytechnics were sampled. The representative sample consists of the final year students in all the departments in the Institute of Technology Kwara State Polytechnics. In all, 120 respondents were selected for the study.

Instrumentation

The data for this study was gathered through the use of questionnaire. Researcher-designed questionnaire was developed as instrument for obtaining data from the respondents though the instruments used by other researchers served as a guide. The questionnaire was tagged 'Information and Communication Technology Skills and Graduate Employability Questionnaire' (ICTSGEQ) was administered on all the respondents of the selected polytechnic. In order to ascertain the validity of the instruments, the drafts of the instruments (ICTSGEQ) was given to experts for both face and content validity. The opinions and suggestions of the experts were incorporated into the final instruments that were administered on the respondents. To determine the reliability, the test re-test reliability method was adopted and Pearson product moment correlation statistics was used to calculate the co-efficient at 0.05 significance level. A correlation of 0.83 was achieved which was considered high enough to justify the reliability of the questionnaire.

Procedure for Data Collection

The administration of the instruments to the respondents was done by the researchers. Due explanation was made on each section and sufficient time was given for completion of each questionnaire, after which they were retrieved.

Methods of Data Analysis

Specifically, descriptive statistics such as frequency counts and percentages were used to analyze the data collected in order to answer the research questions raised for this study. T-test was used to test the hypothesis formulated because the study is on significant difference. The hypothesis was tested at 0.05 level of significance.

Results:

Research Question 1: What are the ICT facilities available that could aid graduate employability of Polytechnics students in Kwara State?

Table 1: ICT facilities available for Polytechnic students that could aid graduate employability

ICT FACILITIES	AVAILABLE Frequency	(%)	NOT AVAILABLE Frequency	(%)
Desktop Computer	56	(46.7)	64	(53.3)
Laptops	108	(90)	12	(10)
Internet Facilities	72	(60)	48	(40)
Printers	35	(29.1)	85	(70.8)
Scanners	51	(42.5)	24	(57.5)
Flash Drive	118	(98.3)	2	(1.7)
Compact Discs	48	(40)	72	(60)

Table 1 shows the ICT facilities available in the polytechnic. It is evident from the table that 56 (46.7%) shows that computer is available while 64 (53.3%) said that computer were not available, also 108 (90%) shows that laptops were available while 12 (10%) showed contrary opinion. Findings from the respondents further showed that 72 (60%) said that they have access to internet facilities while 48 (40%) said that they do not have. Again, 35 (29.1%) said

that they were not available. Only 51 (42.5%) of the respondents showed that scanners were available while 24 (57.5%) said that they were not available. 118 (98.3%) of the respondents said that flash drive were available while only 2 (1.7%) said they were not available.

Research Question 2: What is the extent of undergraduate's use of ICT facilities?

Table 2: Extent of undergraduate's use of ICT facilities

Extent of undergraduate's use	Frequency	Percentage
Everyday	74	61.7
Once a week	33	27.5
Once a month	6	5
Never	7	5.8
Total	120	100.0

Table 2 revealed that 74 (61.7%) make use of ICTs facilities everyday, 33 (27.5%) use ICT facilities once a week, 6 (5%) make use of it once a month while 7 (5.8%) never use ICT facilities.

Research Question 3: What role does ICT skills played in graduate employability among polytechnics students in Kwara State.?

Table 3: Information and Communication Technology skills Necessary for Graduate Employability

S/N	ICT Skills	Yes	%	No	%
1.	Computer literacy skills aids graduate employability (ability to use a range of software via MsWord, MsExcel)	118	(98.3)	2	(1.7)
2.	Reception of digital data skills enhance employment (ability to receive data on computer via e-mail, e-transact)	104	(86.7)	16	(13.3)
3.	Storage of data skills helps to secure job (ability to store information on computer via Discs, Flash Drive)	103	(85.8)	17	(14.2)
4.	Retrieval of data skills facilitates graduate employment (ability to access different sources, technologies and media).	92	(76.6)	28	(23.4)
5.	Conversion/manipulation of data skills aid employment (ability to convert data from different sources, technologies and media)	90	(75)	30	(25)
6.	Transmission of data skills (ability to transfer data from different sources, technologies and media)	105	(87.5)	15	(12.5)

Tables 3 revealed that majority of the respondents are of the opinion that ICT skills are a necessary prerequisite to graduate employability. 118 (98.3 %) said that computer literacy skills aid graduate employability while only 2 (1.7%) said no. Also, 92 (76.6%) of the respondents said yes to item 3 while only 28 (23.4%) said no to item 3. 105 (87.5%) said yes to item 6 while 15(12.5%) said no to item 6.

Hypothesis One: There is no significant difference between graduate who possess ICT skills and those who do not in terms of employability of Polytechnics in Kwara State

Table 4: Results of t- test on Graduate with ICT Skills and Graduate without ICT Skills

Variable	N	$\bar{X}$	SD	Df	Cal t-value	Crit t-value	Decision
Graduates With ICT Skills	60	2.61	.242	118	5.14	.196	Rejected
Graduates Without ICT Skills	60	2.78	.112				

The result of the t- test in table 4 indicates that the calculated t-value of 5.14 is greater than the critical t-value of .196 for 118 degrees of freedom at 0.05 level of significance. Hence, the hypothesis that state there is no significant differences between graduate who possess ICT skills and those who do not in terms of employability of polytechnics students in Kwara State is hereby rejected. This means that graduates who possess ICT skills will first be employed in labour market than graduates without ICT skills.

Discussion of Findings

This section gives detailed explanations on the various findings discovered from the research questions and the hypothesis tested. For instance, the findings on the ICT facilities available in the polytechnics in kwara state as indicated on table 1 shows that laptops and flash drives were available in the polytechnic sampled in the study. ICT facilities such as laptops and flash drives are not

significantly low. The finding is supported by Akuegwu (2011) who found that higher institution students' access to these ICT tools is significantly high. That is, higher institution students' access to ICT tools with regards to photocopiers and mobile telephones is high. This is because they are available in such a way that students can easily lay hands on them and use.

Findings from table 1 further revealed that ICT facilities such as desktop computers, internet facilities, printers, scanners and compact discs are not available. This finding is in line with the earlier researchers like Akuegwu (2011) who revealed that higher institution students' access to ICT tools is significantly low. Findings from the research question 2 in Table 2 shows that majority of the undergraduate students make use of ICT facilities every day. This is because laptops and flash drives are ICT facilities that help to facilitate reception and storage of data as fast as possible. Findings from table 3 on the research question three revealed that ICT skills are needed for gaining employment in the labour market.

The results of hypothesis one indicated that graduates with ICT skills significantly differ from those without ICT skills in terms of employability. This means that graduates who possess ICT skills will first be employed in labour market than graduates without ICT skills. The finding corroborates the findings of earlier researchers such as Odufowokan (2010) who found that ICT played significant role in solving unemployment problems and Akuegwu (2011) who found that higher institution students who have access to ICT tools had better preparations for labour market than their counterparts who have not and there is significant influence of higher institution students' level of access to ICT on their labour market preparation.

Conclusion and Recommendations

Based on the findings of this study, it was concluded that ICT facilities can enhance employability of polytechnic graduates. ICT facilities are significantly low among graduates of polytechnics except laptops and flash drives. Graduates with ICT skills significantly differ from those without ICT skills in terms of employability.

Based on the findings of this study, the following recommendations were made:

Firstly, polytechnic graduates should endeavor to get ICT facilities such as printers and scanners since they are likely to make use of them while in employment. Also, polytechnic graduates that have never used ICT facilities should be encouraged learning how to make use of them as they are necessary in gaining employment after graduation. Lastly, internet facilities should be provided by the school management for students to familiarize themselves to its usage before graduation.

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