EXTENT ICTS CONTRIBUTE TO ACQUISITION OF COMMUNICATION SKILLS BY OFFICE TECHNOLOGY AND MANAGEMENT STUDENTS OF POLYTECHNICS IN ABIA AND IMO STATES

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ABSTRACT

The need to justify the demands for adequate provision of information and communication technology (ICT) resources for Office Technology and Management (OTM) programmes in Nigerian polytechnics necessitated this study to determine the extent ICTs contribute to communication skills acquisition among OTM students in public polytechnics in Abia and Imo States. The design adopted for the study was descriptive survey and the population was 423 HND II students. Proportionate sampling technique was used to draw a sample of 195 students. Data were collected using a five-point rating scale questionnaire. Findings revealed that gender significantly influenced the extent ICTs contribute to their acquisition of communication skills while institution ownership did not. Based on the findings, it was recommended among others that government should ensure adequate provision and functionality of the ICT resources for the programme while lecturers should utilize them effectively in instructional delivery to enhance students' skills acquisition for employment success upon graduation.

KEY WORDS: ICT, Acquisition, Office Technology and Management, Communication Skills

Introduction

The introduction of modern technologies in today's office has simplified office procedures in no small measure. Most office jobs and duties of the secretary which were previously performed manually have become automated. Nwaokwa and Okoli (2012) averred that this transformation has resulted in the development of automated systems that rely on electronic collaboration and communication networks, text processing, image processing and other information communication technologies (ICTs). Thus, the diversities of these office technologies require the secretary to possess new skills and sub-skills to facilitate relevance in the modern office.

Communication has become very easy through the use of smart phones, computers, internet, different social communication softwares such as short messaging service (SMS), e-mail, WhatsApp, Facebook, Instagram and LinkedIn among others. According to Akintunde and Angulu (2015), ICT is an umbrella term that includes various communication devices or applications such as radio-sets, televisions, cellular phones, computer hard ware and software satellite systems.

Likewise, ICT has enhanced teaching and learning processes at various levels of the education system. Consequently, the Federal Republic of Nigeria (FRN, 2013) stated that information technology is a critical part of the objectives of education at all levels; basic, secondary, teacher education, polytechnic and university. The purpose is to ensure that at each level of education, the school is able to equip learners with the knowledge and relevant skills for the world of work and self- reliance in the current digital era. Ile and Ementa (2016) posited that ICT has rapidly changed and revolutionized the nature and course contents of different educational programmes in tertiary institutions.

According to Yekini (2014), ICT refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. In the same vein, Scott in Agbetuyi and Oluwatayo (2012) described ICT as encompassing a range of applications, communications and technologies which aid information retrieval and research communication and administration. ICT helps students communicate effectively using various hardware and software resources. It helps students of OTM in their class assignments, prepare their reports and produce seminars and projects. It enables students to access data and information through the internet to widen their knowledge, keep in touch with their lecturers and fellow students through the use of social media tools such as Facebook, WhatsApp, Instagram, messenger among others.

It facilitates collaboration among the students to discuss issues and solve problems relating to their common course. This could be the reason Maduabuchi and Okoronkwo (2014) posited that computer technology has improved the quality of students' academic research and their written work.

Office Technology and Management (OTM) is a programme of study in Nigerian polytechnics and an option of the business education programme in universities and colleges of education. In the polytechnics, the programme is designed in two levels of National Diploma (ND) and Higher National Diploma (HND)-for two years each with a one-year industrial attachment in between. The main objective of OTM is to equip learners with psychological and practical skills and knowledge relating to occupations in various sectors of the economy and social life for effective work performance in employment and self-reliance on graduation (NBTE, 2004). The curriculum emphasizes the acquisition of ICT skills, which are very important in the technology-driven office of today. According to Amiaya (2014), the mandate of the OTM programme is to produce knowledgeable and skillful modern secretaries. This was why Ugwuanyi (2012) posited that graduates of OTM are expected to be familiar with office concepts, office procedures, modern office application, management information systems, advanced web page design, professional career development, professional ethics and social responsibility.

Skill is the ability to do something well. This implies the ability to use one's familiarity excellently and eagerly to do something well. Skill can be technical, people, language or communication skills. According to Atakpa (2014) skill is the rapidity, precision, expertise, dexterity and proficiency exhibited through mental and manual repetition of performance of an operation. It is a well-established habit of doing something through acquisition of performance capabilities. In the context of this study, skill is the ability of an individual to apply technological

knowledge to solve problems in the work environment. The study focused on acquisition of communication skills which is of utmost importance in all facets of life for different categories of students and workers.

This study is based on Jean Piaget's Constructivism theory which states that people produce knowledge and form meaning based on their experiences. The key components which create the construction of the learners' new knowledge are accommodation and assimilation. Accommodation is reframing new experiences into the mental capacity already present. Since individuals believe that the world works in a particular manner, when things do not work within that context, they tend to accommodate. On the other hand, assimilation causes individuals to incorporate new experiences into the old in order to develop new outlook, rethink misunderstandings and alter their opinions. The theory explains how learning actually occurs with the role of teachers as facilitators of learning instead of dispensers of knowledge thereby allowing students develop their own knowledge and understanding.

The Office Technology and Management (OTM) curriculum was well packaged with several courses which are designed to equip the graduates with skills to fit into today's ICT-driven workplace and business environment. The researchers observed that OTM students in state and federal polytechnics in Abia and Imo states utilize ICT resources but do not seem to perform as desired in communication skills. This motivated the study to ascertain the extent ICT contribute in their acquisition of communication skills. The subjects used in this study are male and female HND II OTM students in state and federal polytechnics in the two states. These variables were thought to affect the extent ICT contributes to acquisition of communication skills among the students. According to Okeke, Ezenwafor and Umoru (2012), the effects of ICTs on students' learning may vary according to environment, knowledge, skills and extent of utilization. Similarly,

institution ownership could affect the extent ICT contributes to OTM students' skills acquisition because federal institutions tend to be better funded than state institutions. This could be why Ekpoto and Bassey (2018) reported that institutional ownership influenced the research skills of postgraduate students.

The problem of this study is that OTM graduates from polytechnics in Abia and Imo states seem unable to effectively utilize ICT resources in employment due to their obvious inability to acquire the relevant skills whereas the curriculum was designed to prepare them for the purpose. This necessitated the study to determine the extent ICT contributes to OTM students' acquisition of communication skills in order to provide empirical evidence for objective remedial actions by relevant stakeholders. The outcome of the study is expected to be of great benefits to OTM students, lecturers, polytechnic management, the supervisory agency for polytechnics in Nigeria (the National Board for Technical Education, NBTE), Nigerian government and citizens as well as future researchers.

Purpose of the Study

The main purpose of the study was to determine the extent ICTs contribute to the acquisition of communications skills among OTM students in polytechnics in Abia and Imo states.

Research Questions

One research question guided the study, thus:

1. To what extent do ICTs contribute to acquisition of communication skills among OTM students in polytechnics in Abia and Imo states?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. Gender does not significantly influence the OTM students' mean ratings on the extent ICTs contribute to their acquisition of communication skills.
2. There is no significant difference between the mean ratings of OTM students in federal and state-owned institutions on the extent ICTs contribute to their acquisition of communication skills.

Method

The study adopted descriptive survey research design. It was conducted in Abia and Imo states in the South-East Nigeria. The population of the study was 423 HND II OTM students in all the three polytechnics in the area in the 2016/2017 academic session. A sample size of 195 was drawn using proportionate sampling technique whereby 46 percent was sampled from each school. A five-point rating scale questionnaire titled "Extent ICTs contribute to communication skills acquisition by OTM students (EICCSAOTMS)" was used to collect data for the study. The instrument contained 16 items and was developed by the researchers based on knowledge gained from review of related literature and objective of the study. The instrument was validated by two experts in Business Education and one in Educational Management and Evaluation in the Faculty of Education, Nnamdi Azikiwe University, Awka. A pilot test was used to establish the reliability of the instrument with Cronbach Alpha which yielded reliability coefficient value of 0.71. Copies of the instrument were administered on the subjects through direct contact and 187 copies were duly completed and retrieved with an attrition rate of only eight copies (less than 5 percent). Mean and standard deviation were used to answer the research question and determine the closeness of the respondents' mean ratings. Decision on the research question was based on the cluster mean score relative to the real limits of numbers on a five-point scale. The students' t-test statistical method was used to test the null hypotheses at 0.05 level of significance. The decision was

that where the calculated t-value was greater than or equal to the critical t-value ($t_{cal.} \geq t_{crit.}$), the null hypothesis was rejected whereas the null hypothesis was not rejected where the calculated t-value was less than the critical t-value ($t_{cal.} \leq t_{crit.}$). The analysis was carried out using Statistical Package for Social Sciences (SPSS) version 23.

Results

Table 1: Respondents' Means Ratings on the Extent ICTs Contributes to OTM Students' Acquisition of Communication Skills (N=187)

S/N	Communication Skills	$\overline{\chi}$	SD	Remarks
	Ability to:			
1.	share and transfer file/documents over a network.	4.39	0.99	HE
2.	download information from the internet.	4.56	0.94	VHE
3.	understand and interpret written communication.	4.10	0.93	HE
4.	understand and interpret oral communication.	3.99	0.82	HE
5.	construct clear and correct personal letters.	4.02	0.76	HE
6.	construct clear and correct official letters.	3.86	0.89	HE
7.	listen and understand news from radio and television.	4.60	0.77	VHE
8.	use mp player for communication.	3.82	0.85	HE
9.	use of e-book reader for communication.	3.80	0.96	HE
10.	interpret data and communicate information accurately.	3.97	0.89	HE
11.	take data processing correctly and clearly express my ideas in group discussions.	4.00	0.69	HE
12.	use social networks to discuss common course problems with other students.	4.11	0.77	HE
13.	share ideas with colleagues in other institutions.	4.01	0.95	HE
14.	relate problems in a course with the lecturer.	3.73	0.83	HE
15.	interpret and correctly apply hints from course lecturers.	3.77	0.79	HE
16.	use scanners, digital camera, printer, facsimile machines, photocopiers.	3.94	0.82	HE
	Cluster Mean	**4.04**		

Table 1 shows that two out of the 16 listed communication skills have mean scores of 4.56 and 4.60. This shows that ICTs contribute to their acquisition by the OTM students at a very high extent. The remaining 14 items with mean scores ranging from 3.73 to 4.39 show that ICTs contribute to their acquisition by the students to a high extent. The cluster mean score of 4.04

indicates that ICTs contribute to OTM students' acquisition of communication skills to a high extent. The standard deviations for all the items are within the same range, which shows that the respondents were homogenous in their ratings.

Hypothesis 1

Gender does not significantly influence the respondents' mean ratings on the extent ICTs contribute to acquisition of communication skills by OTM students.

Table 2: Summary of t-test Analysis of Difference in the Mean Ratings of Male and Female OTM Students on the Extent ICTs Contribute to Their Acquisition of Communication Skills

Source of variation	N	Mean	SD	df	$t_{cal.}$	$t_{crit.}$	Decision
Male	49	59.47	3.60	185	2.58	1.96	Reject H_o
Female	138	65.42	3.34				

Table 2 shows that t-calculated value of 2.58 at 185 degree of freedom was greater than the t-critical value of 1.96 (2.58 > 1.96). This shows that gender significantly influenced the respondents' mean ratings on the extent ICTs contribute to acquisition of communication skills by OTM students. Therefore, the null hypothesis was rejected.

Hypothesis 2

There is no significant difference between the mean ratings of respondents from state and federal institutions on the extent ICTs contribute to acquisition of communication skills by OTM students.

Table 3: Summary of t-test analysis of Difference in the Mean Ratings of Respondents from Federal and State Polytechnics on the Extent ICTs Contribute to Acquisition of Communications Skills by OTM Students

Source of variation	N	Mean	SD	df	$t_{cal.}$	$t_{crit.}$	Decision
Federal	37	60.08	3.10	185	1.83	1.96	Do not reject H_o
State	150	64.79	3.46				

Table 3 shows that t-calculated value of 1.83 at 185 degree of freedom was less than the t-critical value of 1.96 (1.83 < 1.96). This shows that institution ownership does not significantly influence the respondents' mean ratings on the extent ICTs contribute to acquisition of communication skills by OTM students. Therefore, the null hypothesis was not rejected.

Discussion

Findings of the study revealed that ICTs contribute to OTM students' acquisition of communication skills to much extent. This finding is in agreement with Owhologbo, Okoro and Ojianyaegbu (2012) which revealed that exposure of OTM students to modern technologies help them to acquire communication skills needed by employers of labour. The findings further showed that gender significantly influenced respondents' mean ratings on the extent ICTs contribute to OTM students' acquisition of communication skills. This difference in opinions could be attributed to gender gap in the use of ICT and level of skills acquired. Supporting this finding, Tella and Mutula (2014) pointed out in their study that there is marked significant gender difference in level of ICT skills acquired by male and female students. Furthermore, ownership of institution did not influence respondents' mean ratings in this regard. This finding is in support of Amiaya (2016) who reported that ICTs enhance OTM students' acquisition of employability skills for effective work performance.

Conclusion

Based on the findings of the study that ICTs contribute to OTM students' acquisition of communication skills to much extent it was concluded that the demand for adequate supply and utilization of ICT resources for the training OTM students in Nigerian polytechnics is meaningful and justified. This is because the ability to communicate effectively using ICT resources is one of the key skills required for employment in the digital era.

Recommendations

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

1. OTM lecturers should endeavour to adequately utilize available ICT resources and vary their instructional delivery methods to stimulate and sustain students' interest in using them to enhance their academic performance and acquire communication and other skills needed for employment and effective work performance upon graduation.
2. OTM students and their sponsors should endeavour to purchase personal computers for their out-of-school practical activities including research to continually develop their communication skills.

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