EDUCATORS AND STUDENTS' PERCEPTION OF THE IMPACT OF ICT ON SKILL DEVELOPMENT IN VOCATIONAL EDUCATION IN TERTIARY INSTITUTIONS IN ANAMBRA STATE.

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Abstract

This study investigated educators and students 'perception of the impact of ICT on skill development in vocational education in tertiary institutions in Anambra State. One research question guided the study and one hypothesis was tested at 0.05 level of significance. Descriptive survey research design was used for the study and the population consists of 2,620. A sample of 240 was drawn and used for study. A 20 items questionnaire structured on a 4 –points rating scale was used for data collection. Data collected were analyzed using mean and standard deviation to answer research question and determine the homogeneity or otherwise of the respondents; t- test was used to test the null hypothesis. The findings of the study revealed that ICT has a significant impact on skill development in vocational technical education in tertiary institution in Anambra state by increasing knowledge of computer and building a strong value for a technologically advanced work force among others. Based on the findings, it was concluded that ICT is indispensable in skill development in vocational technical education. It was, therefore, recommended that the Ministry of Education, at state and federal levels, should employ vocational technical educators with ICT skills to impart the knowledge and skills and that all higher institutions that offer vocational technical education should be beneficiaries of ICT projects.

Introduction

Information and communication technology (ICT) is commonly used in government and education and other forms of operations at the current moment. The phrase was coined in the year 2000 in the United Kingdom by the National Curriculum Document. Many definitions exist for the term. According to Watia.com (2015), ICT is an umbrella term that includes any communication device or application, encompassing radio, television, cellular phones, computer and network hardware and software and other satellite systems as well as various services and applications associated with them such as video conferencing and distance learning (What is .com, 2015). Also ICT in education deals with the use of information and communication technologies within the educational technologies. The main purpose of ICT in education is to implement the use of ICT equipment and tools in the teaching and learning process as a media as methodology. With a view to familiarizing students with the use and workings of computers and related social and ethical issues.

Educators and policy makers worldwide recognize the potential of ICT to have significant impact on education and on people's daily lives in general. In view of this, the federal Republic of Nigeria (FRN,2002) made provision for the integration of ICT in the nation's educational system at all levels. The document posited that the government shall provide facilities, infrastructure and trainings necessary for the integration and promotion of ICT at all levels of the education.

Vocational technical education (VTE) is defined in different perspectives. According to Kewey and Hamburger (2008) it is any education directed towards the preparation of individuals for skills performance. Moreover, Mbata (2010) explained that VTE is an aspect of education designed to develop skills,

abilities, understanding, attitudes work habits and appreciation encompassing knowledge and information needed by workers to enable them make progression in employment on a useful and productive platform. The central objective of vocational technical education centers on the achievement of a socio-economic development that will actually manifest in economic stability, industrial harmony, technological advancement and improved standard of living for all. **Therefore, for a country to achieve manpower development, it should havest0 that has their skill manpower well developed is the proper integration of the vocational and technical education in place.**

The impact of ICT in skilled manpower development through vocational technical education in higher education cannot be over emphasized. In this technological age, every one requires ICT competence to survive. According to Adome and Anie (2010) organizations are deeming it necessary to train and re-train their employees to acquire or increase their knowledge of computers and other ICT applications. This calls for early acquisition of ICT skill by vocational students. ICT skills have the potential to enrich, accelerate and deepen vocational technical skills and to motivate and engage vocational students to well relate school experience to work practices. This will enable them to be self-reliant, job creators, and as well strengthen vocational technical teaching in Nigerian higher institutions (Davis and Teale, 1999). In line with the above, Emuku (2000) opined that new instructional techniques that use ICTs provide a different modality of instruction for vocational education

institution students. The author, emphasized that ICT use allows for individualization of learning. Whenever these new technologies are used, students have access to tools that adjust to their attention span and provide valuable and immediate feedback for literacy enhancement. This is why Goshit (2012) stated that effective ICT integration and application in school's curriculum in Nigerian higher institutions will improve Nigerian vocational technical education system (VTE) by giving vocational students a better education. Hence, this paper on the impact of ICT on skilled development in vocational education in tertiary institutions in Anambra State is considered imperative.

Purpose of the Study

The purpose of this study was to determine the perception of educators and students on the impact of ICT on skilled development in vocational education in tertiary institution in Anambra State.

Research Question

One research question guided the study, thus:
What are the perception of educators and students on the impact of ICT on skill development in vocational education in tertiary institution in Anambra State?

Research Hypothesis

One null hypothesis was tested at 0.05 level of significance. There is no significant difference on the perceptions of educators and students on the impact of ICT on Skill development in vocational education in tertiary institution in Anambra State.

Method

A descriptive survey research design was adopted for the study. The design is appropriate for the study since it sought perception or opinion of vocational education students and educators through the use of structured questionnaire. The study was carried out in four higher institutions in Anambra State, Nigeria. The population of the study was 2,620 respondents comprising vocational education students and educators from four major higher institutions that offer vocational education in Anambra State. These universities comprise Nnamdi Azikiwe University, Awka; Odumegwu Ojukwu State University, Federal Polytechnic, Oko, and Federal polytechnic Umuenze. A sample of two hundred and forty (240) respondents made up of 220 students and 20 educators were used for the study.

A simple random sampling technique

was used to draw a sample of 240 (220 students and 20 lecturers). The instrument for data collection was a 4-point rating scale questionnaire which was face validated by 2 experts, one from the field of VTE and the other from ICT. The questionnaire contained 20 items reflecting the impact of ICT on Skilled development in vocational education in tertiary Institutions in Anambra State.The data were analyzed usingmean and standard deviation to answer the research question and determine the homogeneity or otherwise of the respondents while t-test statistics was used to test the null hypothesis at 0.05 level of significance.

Results
Table 1: Mean ratings and standard deviation of students' and educators' perception on the impact of ICT on skill development in vocational education in tertiary institutions in Anambra State.

Students Educators

S/N	Item Statement	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	Remarks
1.	Increased in knowledge of computer.	3.37	0.56	3.19	0.74	Agree
2.	Development of ICT skilled professionals	3.38	0.58	3.33	0.65	Agree
3.	Establishment of ICT -Based vocational technical facilities.	3.32	0.52	3.14	0.35	Agree
4.	Motivation of vocational education students	3.50	0.52	3.67	0.50	Agree
5.	Engagement of vocational education students	3.47	0.53	3.38	0.49	Agree
6	Facilitation of acquisition of skills by vocational technical students.	3.38	0.66	3.56	0.58	Agree
7.	Enhancing Nigeria's vocational technical competencies.	3.28	0.63	3.14	0.79	Agree
8.	Better education to vocational technical education students.	3.33	0.67	3.01	0.70	Agree

9.	Acquisition of ICT skills by vocational education students.	2.38	0.61	3.19	3.38	Agree
10	Strengthen of vocational technical teaching in higher institutions in Nigeria.	3.35	0.74	3.14	0.79	Agree
11.	Competency in vocational Administrative work.	3.27	0.66	3.24	0.43	Agree
12.	Escalation of ICT skills competency.	3.26	0.67	3.42	0.50	Agree
13.	Building a strong value for technologically advanced work force.	3.35	0.61	3.13	0.64	Agree
14.	Establishments of ICT base human Infrastructure.	3.25	0.45	3.42	0.50	Agree
15	Acquisition of database mgt. skills.	3.30	0.60	3.09	0.65	Agree
16.	It will help in capacity building acceleration.	3.43	0.59	3.46	0.56	Agree
17.	Enrichment of skills in computer science.	3.39	0.39	3.23	0.53	Agree
18.	Creation of economic viability for tomorrow's workers	3.36	0.61	3.04	0.50	Agree
19.	Increasing of school experience to work force.	3.43	0.59	3.42	0.58	Agree
20.	Sharping of cognitive reasoning and deepening of vocational technical education.	3.43	0.59	3.01	0.20	Agree
Cluster mean		**3.33**	**0.53**	**3.26**	**0.69**	

Table 1 shows perception of the vocational education students and educators respondents on the impact of ICT on skill development in vocational education in tertiary intuitions in Anambra State. From the analysis, their mean scores range from 3.01 – 3.67 which were above the decision cut-off mean of 2.50. Standard deviation for all the items were also ranged from 0.20 – 0.79 indicating that there was less variability in the perception of the respondents. The cluster mean of the respondents were 3.33 and 3.26 for vocational students and educators respectively. This shows that both respondents (students and educators)

agreed that ICT has a significant impact on skill development in vocational technical education in tertiary institution.

Table 2, t-Test analysis of respondents mean ratings of students' and educators perception on the impact of ICT on skill development in vocational education in tertiary institutions in Anambra State.

Students Educators

S/N	Item Statement	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	t-cal	Decision
1.	Increased in knowledge of computer.	3.37	0.56	3.19	0.74	1.18	NSI
2.	Development of ICT skilled professionals	3.38	0.58	3.33	0.65	1.75	NSI
3.	Establishment of ICT -Based vocational technical facilities.	3.32	0.52	3.14	0.35	2.04	SI
4.	Motivation of vocational education students	3.50	0.52	3.67	0.50	-1.14	NSI
5.	Engagement of vocational education students	3.47	0.53	3.38	0.49	0.79	NSI
6.	Facilitation of acquisition of vocational technical education students.	3.38	0.66	3.56	0.58	-2.90	NSI
7.	Escalation of Nigeria's vocational technical competencies.	3.28	0.63	3.14	0.79	1.80	NSI
8.	Better education to vocational technical education students.	3.33	0.67	3.01	0.70	-2.00	NSI
9.	Acquisition of ICT skills by vocational education students	2.38	0.61	3.19	3.38	2.00	SI
10.	Strengthen of vocational technical teaching in higher institutions in Nigeria.	3.35	0.74	3.14	0.79	1.75	NSI
11.	Competency in vocational administrative work.	3.27	0.66	3.24	0.43	0.92	NSI
12.	Escalation of ICT skills competency.	3.26	0.67	3.42	0.50	0.44	NSI
13	Building a strong value for technologically advanced work force.	3.33	0.61	3.13	0.64	1.71	NSI
14.	Establishments of ICT base human Infrastructure.	3.25	0.45	3.42	0.50	2.04	SI
15	Acquisition of database mgt skills.	3.30	0.60	3.09	0.65	1.76	NSI
16.	It will help in capacity building acceleration.	3.43	0.59	3.46	0.56	2.26	SI

S/N	Item Statement	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	t-cal	Decision
17.	Enrichment of skills in computer science.	3.39	0.39	3.23	0.53	1.80	NSI
18.	Creation of economic viability for tomorrow's workers.	3.36	0.61	3.04	0.50	2.90	SI
19.	Enhancing relation of school experience to work force.	3.43	0.59	3.42	0.58	2.19	SI
20.	Sharping of cognitive reasoning and deepening of vocational technical education.	3.43	0.59	3.01	0.20	2.23	SI

Table 2 analysis shows differences in the perception of vocational education students and educators on the impact of ICT on skill development in vocational technical education in tertiary institution in Anambra State. The data revealed that items $(1-2), (4-8), (10-13), 15,$ and 17 have t-calculate value ranging from (1.18 – 1.75), (-1.14 – 0.79), (0.44-1.80), 1.76 and 1.80 respectively. These values were

less than the critical value of t (t-tabulated) of 1.96 at 0.05 levels of significance and 238 degree of freedom. This implication of this result is that the null hypothesis was upheld for 13 corresponding items. This signified that there was no significant difference in the perception of vocational education student and educators on the impact of ICT on skill development in vocational

technical education in higher institutions in Anambra State.

In the same vein, items 3, 9, 14, 16, 18, 19 and 20 have t-calculated values of 2.04, 2.00, 2.04, 2.26 and 2.90, 2.19 and 2.23 respectively. These values were greater than the t-tabulated value of 1.960 at 0.05 levels of significance and 238 degree of freedom. This indicated that the null hypothesis was rejected, which signified that vocational education students and educators differ in their opinions on the impact of ICT on skilled manpower development via vocational technical education in higher institution in Anambra State.

Discussion

The findings of this study show that ICT plays an impact on skill development in vocational education in tertiary institutions in Anambra State, specifically, in these areas such as engagement of vocational education students, increase in knowledge of computer, development of ICT skilled professionals, motivation of vocational education students, enhancing Nigeria vocational technical education system. It alsogives vocational technical education students a better education by relating school experience to work practices, facilitation of acquisition of vocational technical competencies, building strong value for technologically-advanced workforce, and competence in the vocational administrative work. This finding is in line with Ikemelu (2009) who stipulated that ICTs have the potential to accelerate, enrich and deepen skills, to motivate and engage students to relate school experience to work practices, create economic viability for tomorrow's workers as well as strengthening teaching and assisting schools change. Furthermore, these findings agreed with Goshit (2006) who stated that ICT integration and application in higher institution in Nigeria will improve Nigerian's educational system and give students a better education as well as developing skilled ICT professionals who will be well-equipped to solve IT problems in Nigeria.

Conclusion

The findings is an eye-opener that ICT is indispensable in skill development invocational education.

Recommendations

Based on the findings of the study, the following recommendations were made:
1. the Ministry of Education, at state and federal levels, should employ vocational technical educators with ICT skills to impart the knowledge and skills and that all higher institutions that offer vocational technical education should be a beneficiaries of ICT projects;

2. the ICT policy statements on vocational technical education should be enforced by the government at all levels;
3. government should make all higher institutions offering vocational technical education in the study area benefit from ICT projects;
4. curriculum designers in vocational technical education should make ICT education compulsory to all students of the programme;
5. vocational and technical education educators should effectively utilize ICT resources for instrumental delivery.

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