

Acquisition of Information and Communication Technology (ICT) Training skills from Formal and Informal Training Centres for Self-Employment amongst Youths in Uyo Local Government Area of Akwa-Ibom State

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Abstract

The study was on Acquisition of Information and Communication Technology (ICT) Training skills from formal and informal training centres for Self-Employment amongst Youths in Uyo Local Government Area of Akwa-Ibom State. Two research questions and two research hypotheses guided the study. The study adopted survey design. Area of the study was Uyo Local Government Area. Population of the study consisted of 790 youths both from the formal and informal training centres. The sample of this study was 308 youths composed of 49 and 259 youths from the formal and informal ICT training centres respectively. A Comparative Study of Formal and Informal ICT Training Skills amongst Youths for Self-employment Questionnaire (CSFIICTTSAYSEQ) was used in the study. The instrument was subjected to face validation by three research experts two from the Department of Business Education and one from the Department of Computer and Robotic Education, University of Uyo, Uyo. In order to determine the reliability of the instrument, 30 copies of the instrument were administered to 30 students both for the formal and informal training centres who were not part of the sampled population. The consistency coefficient was .78 indicating a high reliability coefficient was realised and therefore the instrument was suitable for use in the study. Mean and Standard Deviation was used in answering research questions while t-test was used in testing research hypotheses at 0.05 level of significance. Findings of the study reveal that there is a significant difference between the mean responses of formal ICT training centre and informal ICT training centre on ICT skills acquired by youths for self-employment in Uyo Local Government Area.

Keywords: Information and Communication Technology (ICT), Acquisition, Training, skills

Introduction

Formal Education is a consciously planned instructional process based on a prescribed syllabus and carried on in the school. Formal education is characterized by a rigid external structure determined by prescribed rules and a crop of teachers who assess the performance of

the pupils by using a prescribed grading system (Ebenezer, 2009). The issue of unemployment has been of great concern both in past times and in this recent time. This unemployment issue emerged due to the economic instability, economic recession and the high number of graduates being turned out every year from tertiary institutions in Nigeria. DiaBelen, Oni and Adekola (2000) asserted that lack of acquisition of skills and the type of training which youth were exposed to seem not to favour employment, and this has made active youthful population to remain unemployed after graduation. This poor training mode may also result in disequilibrium between labour market requirements and lack of essential employable skills, coupled with faulty interaction between the educational sector and the economy. This shows that formal education provision may not have adequately solved the unemployment problems of the nation.

According to Ngwu (2003) opined that informal learning is learning resulting from daily life activities related to work, family or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. According to Azuka (2012), Desktop Publishing is an ability to print by combining personal computers and design software to create and edit layouts for producing all kinds of material such as reports, books, magazines, brochures, flyers, and newsletters. Azuka (2012) further stated that desktop publishing is the ability to arrange text and graphics in such a way to effectively communicate ideas, create documents such as advertisements, posters, greetings cards, newsletters and brochures, effectively communicate and attract specific audiences and visually communicate through design, colour, sound, and motion. Basic Internet Skills according to Chukwumezie (2002) is a skill needed to search and carry out different activities including shopping, communicating, learning, and distributing information. Chukwumezie (2002) further listed the skills that are needed by youths in order to manage information effectively via the internet to include keyboarding skill and accuracy, grammatical and communication skills, computer fluency, operating the telephone, surfing the web, browsing the net offline and online and downloading and uploading the software.

According to Zimmermann (1989), “students can be described as self-regulated to the degree that they are meta-cognitively, motivationally, and behaviourally active participants in their own learning process”. In other words, a self-regulated learner is aware of his own learning processes and knows how to monitor and control the processes. She views knowledge and skill acquisition as a systematic and controllable process, and she accepts greater responsibility for her learning outcomes. She is the initiator of the learning process.

Self-regulation plays a crucial role in all phases of learning. Advocators of self-regulated learning argue that students can be taught to become more self-regulated learners by acquiring effective strategies and by enhancing perceptions of self-efficacy. Poor learners can benefit from reciprocal teaching, that is, through processes of modeling, guiding, and collaborative learning. Research has shown that teaching regulatory behaviours improved students’ performance significantly. In fact, after such training, low-achieving students demonstrated outcomes similar to those who were typically high-achieving. Lifelong learning

is increasingly becoming important and will in the future occur in non-academic learning environments. Rapid development in the field of ICT has made it possible to develop highly sophisticated technology enhanced learning environments. Ultimately, the power of ICTs will be determined by the ability of teachers to use the new tools for learning to create rich, new, and engaging learning environments of their students.

Information and Communication Technology, taken separately, information implies fact told, heard or discovered about a thing or person, place, issues and subjects or courses in school. Communication on the other hand means the process or action of passing on information, while Technology is the scientific study and the use of applied sciences to practical tasks in education or industry, (Olubaise, Ojo & Yusuf, 2006). According to Ntuk (2006), information is knowledge and understanding that is usable by the recipient. It reduces uncertainty and surprise value. In a more generic term, ICT refers to technologies which are for collecting, storing, editing and passing of information in various forms (Ser, 1997) cited in Lokman, 1999. A personal computer is the best-known example of the use of ICT, but the term multimedia is also frequently used. Multimedia can be interpreted as a combination of data carriers, for example, video, CD-ROM, Floppy disc, internet and software in which the possibility for an interactive approach is offered. Smeet (1996) cited in Jager and Lokman (1999).

In the context of ICT, here is what can be referred to as the “new” and “old” technologies. “Old” technologies include non-electronic media like print and analogue technologies in which information is transmitted bit-by-bit by electronic wave such as radio. “New” technologies like computers, the internet electronic mail and multimedia (Olubaise, Ojo & Yusuf, 2006). Hence, these new technologies can be grouped into three categories. Information and communication technology use computers that have become indispensable in modern societies to process data and save time and effort. These include computer hardware and peripherals, software computer literacy among others. The second new technology is telecommunication technology which includes telephones (with fax) and the broadcasting of radio and television often through satellites (telephone system, radio and TV broadcasting), while the third new technology is best known as internet, but which has extended to mobile phone technology, voice over IP telephony (VOID), satellite communication and other forms of communication that are still in their infancy as internet mobile, cable, DSL, satellite and other broadband connectivity.

Desktop Publishing Skills amongst Youths for Self-employment

Desktop Publishing is an ability to print by combining personal computers and design software to create and edit layouts for producing all kinds of material such as reports, books, magazines, brochures, flyers, and newsletters (Azuka 2012). It is further stated that desktop publishing is the ability to arrange text and graphics in such a way to effectively communicate ideas, create documents such as advertisements, posters, greetings cards, newsletters and

brochures, effectively communicate and attract specific audiences and visually communicate through design, colour, sound, and motion.

Meanwhile, Oliverio, Passwark, and White (2007), stated that desktop publishing is ability to produce high-quality printed documents that include both text and graphics. It is closely related to word processing and requires many of the same skills. Examples of these documents include newsletters, brochures, and forms. The essential skills required in this area include: keyboarding with speed and accuracy, knowledge and skill in use of software programs, skill in formatting and proofreading of documents, proficiency with grammar, punctuation and spelling, skill in preparing copy from audio recordings, if employed as a transcriptionist, skills in dictating text and commands if using speech recognition. The function of desktop publishers include to write and edit text, create graphics to accompany text, convert photographs and drawing into digital images and then manipulate those images, design page layout, create proposals, develop presentations and advertising campaigns, typeset and do colour separation and translate electronic information film or other traditional forms. The desktop publisher can correct mistakes or compensate deficiencies in the original colour print or transparency. Digital files are used to produce printing plates.

Basic Internet Skills amongst Youths for Self-employment

The internet has become the largest and most important network today and has evolved into a global information super high way. In the opinion of Oluwalola (2006), the internet is a global collection of many different types of computers, computer operators and computer networks that are linked together through telephone lines, satellites, microphones, and all other possible devices. The internet is used in diverse fields, such as business, entertainment, education, communication, medicine, reference, engineering and sports (Okebukola, 2008).

Internet based skill is a worldwide system of computer network. Users of one computer in an environment if permitted can gain access to information from computers in other environments. The internet provides accessibility to wide areas of information on various subject matters. The internet has turned the world into a global village where people from different nations and socio-cultural background can effectively communicate via the internet by exchanging their ideas, values and interests in an interactive manner. Chukwumezie (2002) listed the following skills that are needed by the youths in order to manage information effectively via the net: keyboarding skill and accuracy, grammatical and communication skills, computer fluency, operating the telephone, surfing the web, browsing the net offline and online and downloading and uploading the software.

Eze (2010) conducted a study on the level of information communication and technology skills possessed by office technology and management teachers for effective service delivery in the Polytechnics. The study was carried out in ten Polytechnics in six states of the Middle Belt. The population comprised 100 lecturers of office technology and management in the polytechnics from the Zone. The entire population “n” was studied. The study adopted a simple survey research design. A structured questionnaire was the main

instrument for data collection. The questionnaire was administered to 100 respondents by the research assistants who were inducted to assist. All the copies of the questionnaire were retrieved and analyzed using mean and standard deviation. The finding of the study revealed that office technology and management teachers possess moderate skills in word/data processing skills and low skills in both internet technology and power point skills. This study relates to the present study because the study emphasized on assessment of the extent of ICT Skills acquired by office technology and management teachers. It also adopted the same methodology used in this present study. On the other hand, they differ because while the study under review is on ICT Skills acquired by office technology and management teachers, the present study is on ICT Training Skills amongst youths for self-employment in Uyo Local Government Area in Akwa Ibom State.

The theoretical framework of this study was based on self-regulated theory. The conceptual framework was based on ICT training skills used in this purpose. Desktop Publishing which is one of the ICT skills discussed in this study is what graphic designers would use to produce work which requires organization of text, images and style. The internet is a network of computers, all over the world, interconnected to each other and available to any individual. The internet is used for many different activities including shopping, communicating, learning, and distributing information. To “go into the Internet”, Computers are a primary tool you’ll utilize to use the internet. The review of related literature was on ICT Skills acquired by office technology and management teachers. This created a gap which the present study intends to fill by researching on ICT Training Skills amongst youths for self-employment in Uyo Local Government Area in Akwa Ibom State.

Statement of the Problem

Formal sector employment opportunities in Nigeria can no more keep pace to the number of entrants into the labour market, thereby making the informal sector of the economy to become the rescue by providing self-employment and income for the youth and those retrenched from the formal sector employment. Observation on survey has shown that basic ICT training skills which are parts of the informal education could help in bringing down the rate of unemployment in the nation. The wide range of ICT skills revolutionizing all sectors of the economy and creating new avenues for starting business includes but not limited to Desktop Publishing Skills, Basic Internet Skills, Software Installation Skills and Hardware Maintenance Skills.

Desktop Publishing Skill is a skill which could be acquired both in formal and informal training centres. The problem that arises in acquiring this skill is that in the formal training sector the youths learn the theory aspect of desktop publishing and not the practical aspect of it and this leads to incapability of performing this skill, thus making them not self-reliant as they are not exposed to the practical aspect of this skill. The informal training sector is where desktop publishing skills are supposed to be practice because they are privately owned and they handle the real practical aspect of desktop publishing but in reality this is not so because some

of the owners of this training centres are unable to purchase the computers and accessories that are required to adequately train youths the desktop publishing skills due to the high cost of purchasing these machines. Basic Internet Skills are those skills which an average youth should know. It includes sending mails, detecting hidden mail, browsing the internet in search of information. This skill is lacking in both the formal and informal training centres in that their computer systems are not connected to the internet due to the high cost of getting this connections available, purchasing the router and paying for the subscriptions, thereby making the instructors and lecturers to focus more on the theoretical aspect than the practical aspect of training.

Purpose of the Study

The main purpose of the study was to determine the extent to which acquisition of Information and Communication Technology (ICT) Training skills from formal and informal training centres enhances self-employment amongst youths in Uyo Local Government Area of Akwa-Ibom State.

Specifically, the study sought to:

1. Determine the extent to which Desktop Publishing Skill training acquired from formal and informal ICT training centres help in self-employment amongst youths in Uyo Local Government Area of Akwa Ibom State.
2. Determine the extent to which Basic Internet Skill training acquired from formal and informal ICT training centres help in self-employment amongst youths in Uyo Local Government Area of Akwa Ibom State.

Research Questions

1. To what extent does Desktop Publishing Skill training acquired by youths from formal and informal ICT training centres help in self-employment in Uyo Local Government Area of Akwa Ibom State?
2. To what extent does Basic Internet Skill training acquired by youths from formal and informal ICT training centres help in self-employment in Uyo Local Government Area of Akwa Ibom State?

Null Hypotheses

1. There is no significant difference in the mean responses of youths from formal and informal ICT training centres on Desktop Publishing Skills acquired for self-employment in Uyo Local Government Area of Akwa Ibom State.
2. There is no significant difference in the mean responses of youths from formal and informal ICT training centres on Basic Internet Skills acquired for self-employment in Uyo Local Government Area of Akwa Ibom State.

Methodology

The study adopted survey research design. The study was carried out in Uyo. The total population of the study consisted of 790 youths both from the formal and informal training

centres. The sample of this study was 308 youths, comprising 49 and 259 youths from the formal and informal ICT training centres respectively. This sample size was determined using Taro Yamane formula. The researcher developed instrument titled “A Comparative Study of Formal and Informal ICT Training Skills amongst Youths for Self-employment Questionnaire (CSFIICT TSAYSEQ) was used in the study. The instrument was subjected to face validation by three research validates from the Department of Business Education, University of Uyo, Uyo. In order to determine the reliability of the instrument, 30 copies of the instrument were administered to 30 students both for the formal and informal training centres outside the population sampled. The consistency coefficient was .78 indicating a high reliability coefficient and therefore suitable for use in the study. Data for this study was gotten from the respondents through the administration of the researcher structured questionnaire. Mean and Standard Deviation was used in answering research questions while t-test was used in testing research hypotheses at 0.05 level of significance. A cut off point of 3.0 was chosen such that item with mean responses of 3.0 and above were regarded as influenced while those below 3. 0 were regarded as non-influence.

Results

Research Question 1: To what extent does Desktop Publishing Skill training acquired by youths from formal and informal ICT training centres help in self-employment in Uyo Local Government Area of Akwa Ibom State?

Table 1: Analysis of the Mean Responses on Desktop Publishing Skill training acquired by youths from formal and informal ICT training centres help in self-employment in Uyo Local Government Area of Akwa Ibom State

Desktop Publishing Skill		Formal Training Centre		Informal Training Centre		Remark
		\bar{X}_1	SD	\bar{X}_2	SD	
1	setting page margin on documents using page layout features in Microsoft word	4.18	.70	4.75	.57	I
2	creating documents using Microsoft word application	4.24	.90	4.68	.53	I
3	importing images into your Microsoft word document	4.27	.81	4.60	.72	I
4	producing high quality printed documents such as text and graphics	3.71	.96	4.51	.78	I
5	formatting your documents using line spacing, indentation of paragraph	3.71	.82	4.47	.75	I

6	making use of thesaurus for spell checking in Microsoft word	3.50	1.00	4.41	.76	I
7	using Adobe page-maker application	2.98	1.18	4.18	.91	NI
8	for setting pages for paper publications designing simple programmes using	3.22	1.09	4.40	.78	NI
9	Corel Draw graphics software converting hard copies of images	3.60	1.02	4.22	.86	I
10	drawings into digital images using scanning machine	3.22	1.12	4.23	.97	NI
Grand mean		$\bar{X}_1 = 3.67$		$\bar{X}_2 = 4.46$		

Note: I = Influence, NI = No Influence

The results presented in Table 1 revealed that all items have their mean ranging from 2.98 and 4.75, thereby indicating that the mean value for each item except item 7 in the Formal Training centre is greater than the average cut off point of 3.0. This shows that all the items except item 7, 8 and 10 on the Desktop Publishing Skills, which can be greatly acquired in the informal training centre by youths, helps in self-employment. The table also showed that the standard deviation of the items fall within 0.53 and 1.18. This indicates that the respondents were not contradicting themselves in their responses.

Research Question 2: To what extent does Basic Internet Skill training acquired by youths from formal and informal ICT training centres help in self-employment in Uyo Local Government Area of Akwa Ibom State?

Table 2: Analysis of the Mean Responses on the Basic Internet Skill training acquired by youths from formal and informal ICT training centres help in self-employment in Uyo Local Government Area of Akwa Ibom State $n_1 = 41$, $n_2 = 259$

Basic Internet Skill		Formal Training Centre		Informal Training Centre		Remark
		\bar{X}_1	SD	\bar{X}_2	SD	
1	Using web browser to access the net	4.53	.65	4.62	.67	I
2	Utilizing the basic buttons (i.e. back, refresh, home e.t.c.) when surfing the net	4.18	.89	4.33	.82	I
3	Utilizing the internet Uniform Resource Locator (URL/web address)	3.73	.86	4.24	.89	I
4	Using the internet to compose	3.76	1.03	4.29	.88	1

	messages					
5	sending message with attachment using an e-mail application	4.06	.85	4.33	.91	I
6	Using search engine (e.g. google) to find desired information	4.31	.94	4.39	.88	I
7	Downloading information on the internet	4.10	1.03	4.44	.84	I
8	using the internet for e-banking transaction	3.76	1.13	4.19	.89	I
9	subscribing and unsubscribe to an electronic mail list	3.31	.96	4.03	1.09	NI
10	making use of an online storage platform such as dropbox	3.00	1.12	4.07	.95	NI
Grand Mean		$\bar{X}_1 = 3.87$		$\bar{X}_2 = 4.29$		

Note: I = Influence, NI = No Influence

The results presented in Table 2 revealed that all items have their mean ranging from 3.00 and 4.62, thereby indicating that the mean value for each item except items 19 and 20 in the Formal Training centre is greater than the average cut off point of 3.0. This shows that all the items except items 19 and 20 on the Basic Internet Skills, which can be greatly acquired in the informal training centre by youths, helps in self-employment. The table also showed that the standard deviation of the item falls within 0.65 and 1.13. This indicates that the respondents were not divergent from one another in their responses.

Null Hypothesis 1: There is no significant difference in the mean responses of youths from formal and informal ICT training centres on Desktop Publishing Skills acquired for self-employment in Uyo Local Government Area of Akwa Ibom State.

Table 3: t-test Analysis on the Desktop Publishing Skills acquired by youths for self-employment

Variables	Groups	n	\bar{x}	SD	df	t-cal	Sig.	Decision
Desktop Publishing Skills	Formal Training Centre	493	.76	.68	306	9.19	.000	S
	Informal Training Centre	259	4.60	.57				

Note: S = Significant, df = degree of freedom, X = Mean, S.D = Standard Deviation

The result in Table 3 shows the t-values of the t-test analysis comparing the mean responses of Formal ICT training centres and Informal ICT training centres. The results reveal that there is a significant difference between the mean responses of Formal ICT training centres and Informal ICT training centres on the desktop publishing skills acquired by youths for self-employment in Uyo local government area in Akwa Ibom state. Therefore, the null hypothesis is rejected since the calculated t-value is greater than the Table t-value at 0.05 level of significance.

Null Hypothesis 2: There is no significant difference in the mean responses of youths from formal and informal ICT training centres on Basic Internet Skills acquired for self-employment in Uyo Local Government Area of Akwa Ibom State.

Table 4: t-test Analysis on the Basic Internet Skills acquired by youths for self-employment

Variables	Groups	n	\bar{x}	SD	df	t-cal	Sig.	Decision
Basic Internet Skills	Formal Training Centre	493	3.98	.75	306	3.89	.000	S
	Informal Training Centre	259	4.40	.67				

Note: S = Significant, df = degree of freedom, \bar{X} = Mean, S.D = Standard Deviation

The result in Table 4 shows the t-values of the t-test analysis comparing the mean responses of Formal ICT training centres and Informal ICT training centres. The results reveal that there is a significant difference between the mean responses of Formal ICT training centres and Informal ICT training centres on the basic internet skills acquired by youths for self-employment in Uyo local government area in Akwa Ibom state. Therefore, the null hypothesis is rejected since the calculated t-value is greater than the table t-value at 0.05 level of significance.

Discussion of Findings

Desktop Publishing Skills and ICT Training of Youths for Self-employment in Uyo Local Government Area

The result from the research question 1 on Table 1, showed that there is an influenced response from the respondent on desktop publishing skills from both the formal and informal ICT training centres, aside from Item 7,8 and 10 which showed a no influence response from the formal ICT training centre, thereby implying that these skills can be fully acquired from informal ICT training centres and also with the mean response of the informal ICT training

centres being significantly higher than that of the formal ICT training centre probably explains that the informal ICT training centre is an avenue where these skills are mostly and effectively taught and practicalized. Also, the correspondent hypothesis 1 on Table 5 indicated that the extent of desktop publishing skills acquired by youths from formal and informal ICT training centre is of positive significant influence for self-employment in Uyo Local Government Area. This explains that desktop publishing skills acquired enhances the youths to a great extent to become self-employed. The findings in this study is in line with that of Thomas (2006) who emphasized that students need desktop publishing skills, word processing skills, photocopying, among others to equip tomorrow's employees and employers with the requisite skills, competence and knowledge within and outside the work environment.

Basic Internet Skills and ICT Training of Youths for Self-employment in Uyo Local Government Area

The result from the research question 2 on Table 2 showed that there is an influenced response from the respondent on basic internet skills from both the formal and informal ICT training centres, aside from Item 19 and 20 which showed a no influence response from the formal ICT training centre, thereby implying that these skills can be fully acquired from informal ICT training centres and also with the mean response of the informal ICT training centres being significantly higher than that of the formal ICT training centre probably explains that the informal ICT training centre is an avenue where these skills are mostly and effectively taught and practicalized. Also, the correspondent hypothesis 2 on Table 6 indicated that the basic internet skills acquired by youths from formal and informal ICT training centre is of positive significant influence for self-employment in Uyo Local Government Area. The findings is in line with Chesley (2010) who opined that the internet has spread across most sectors and occupations and has changed the structure of employment and the way work is done such as, information which was previously stored on paper can be transformed into a digital format which makes work more easier, safer and reduce cost.

Conclusion

Acquisition of ICT skills will help youths to become employed and as such, they should be well guided, taught and shown the techniques and rudiments of these skills where ever they find themselves be it in the formal education sector or in the informal education sector. Students in the formal ICT training centres should be shown more of the practical aspects of these skills than the theoretical aspects since in this 21st century, youths tend to remember more of what is seen than what is heard.

Recommendations

The following recommendations were made:

1. State government should provide the necessary ICT facilities to all formal education sector to enhance more practical to be carried out instead of excessive theories due to lack of facilities to practicalize what has been taught.

2. Students should be given free access to these facilities to encouraged and enhance speedy learning using the ICT facilities.

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