



APPRAISAL OF THE LEVEL OF INFORMATION AND COMMUNICATION TECHNOLOGY COMPETENCIES POSSESSED BY OFFICE TECHNOLOGY AND MANAGEMENT (OTM) EDUCATORS FOR EFFECTIVE TRAINING OF SELF-RELIANCE SKILLS IN POLYTECHNICS IN KOGI STATE

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Cite this article:

Tony-Okeme A.F., Iyaji U., Aliyu J.A. (2023), Appraisal of the Level of Information and Communication Technology Competencies Possessed by Office Technology and Management (OTM) Educators for Effective Training of Self-Reliance Skills in Polytechnics in Kogi State. British Journal of Contemporary Education 3(1), 43-58. DOI: 10.52589/BJCE-NECFMBR5

Manuscript History

Received: 10 Feb 2023

Accepted: 12 March 2023

Published: 27 March 2023

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ABSTRACT: *The study was carried out to appraise the level of Information and Communication Technology (ICT) competencies possessed by OTM educators for effective training of self-reliance skills in Polytechnics in Kogi State with a view to finding out the specific skill areas in which competencies are lacking. Six specific objectives and six research questions were raised to guide the study. The study employed the descriptive research design. The population for the study consisted of all the OTM educators at the Federal Polytechnic, Idah and Kogi State Polytechnic, Lokoja. There was no sampling as the population was manageable. A 73-item, 4-point rating scale questionnaire titled: Appraisal of the Level of Information and Communication Technology Competencies Possessed by Office Technology and Management Educators for Effective Training of Self-Reliance Skills in Kogi State (ALICTPOTMEETSS) was used to obtain data from respondents. The findings indicated that OTM educators possessed high competencies in Microsoft Word, Microsoft Excel and Microsoft PowerPoint; however, they recorded low competencies in Microsoft Access, Microsoft Publisher and Internet skills. The study concluded that these levels of competencies possessed have great implications for the self-reliance of OTM students as it justifies the opinion of a number of researchers that lack of competency in office applications has limited the effective impartation of Microsoft office skills. The study therefore recommended amongst others that OTM educators should be trained and retrained in Microsoft Access, Microsoft Publisher and internet skills for effective training and quality instructional deliveries.*

KEYWORDS: Competencies, Office technology and management educators, Effective training, Self-reliance.



INTRODUCTION

Educators are said to determine the achievement and success of instructional goals and objectives of any given programme of study. Thus, without an adequate number of competent and well-equipped educators fully prepared to carry out their responsibilities in the institution, not much can be achieved. Previous research has made it evidently clear that there is a high correlation between educators' competency level and students' learning outcome as the former would be in a better position to more effectively impart their skills to students if they possess high competencies in that particular area of skill. However, the dearth of competent educators remains a huge challenge to many ICT based skills training (OTM programme inclusive). In the face of growing unemployment, there is a dire need for the kind of education that could assist the learner to be self-reliant. Effective training in self-reliance skills in the polytechnic requires quality instruction in the classrooms, relevant curriculum content and adequate training facilities (Nwazor & Nwaukwa, 2015). Thus, the competency level of educators is a key factor in achieving a worthwhile result.

Onyesom and Ashibgwu (2018) assert that no matter how properly designed a programme of study is, it cannot succeed without an adequate crop of lecturers/instructors. Similarly, Udoe and Ndum (2013) posit that no effective and functional programme in tertiary institutions can take place in the absence of competent lecturers. They added that lecturers play a critical role in the development of the nation because they equip students with the necessary skills that make for self-reliance. Competency refers to the knowledge, skills, and know-how required to perform a task effectively. Owing to the nature of OTM programme content, competencies in ICT would continue to be demanded of OTM educators, especially in the face of emerging versions of office productivity applications. The need for OTM educators to develop and maintain high level competencies in ICT skills is germane to the effective training of students to become self-reliant graduates. The term training has become more popularised in academics especially with the advent of office technologies. Agholor (2019) posits that for students of office technology and management programmes to be successful in the operation of self-reliant ventures after graduation, they must possess the requisite skills and competencies which are embedded in the new ICT-based OTM curriculum.

Statement of the Problem

The most suitable office education curriculum today is one that can assist the learner to conveniently operate modern office machines, office productivity applications and at the same time enable him/her to become self-reliant. Thus, it is commendable that the new OTM curriculum encapsulates the relevant ICT courses necessary to enable graduates of the programme not only to fit well in today's workplace but also to become economically self-reliant after graduation. As commendable as this may be, it is however disheartening to note that, the implementation process for the OTM curriculum began without first of all re-aligning the educators through training especially as they are the primary implementers.

As fantastic as the curriculum is, there appears to be issues with its implementation. Based on the assertion of Azih and Ama (2019), one cannot talk about reforming the content of a curriculum without retraining the teachers and instructors involved in the teaching and learning process. As it is often said, no one can give what he does not have. More so, researches have made it evidently clear that the level of an educator's competency in a given programme of study is directly related to the quality of his/her instructional delivery on that subject matter. In



line with the curriculum review, educators in the OTM programme are expected to possess a high level of competencies in internet usage, word processing, spreadsheet, database management system, desktop publisher and presentation skills, among others. No deliberate action has been taken by relevant authorities and stakeholders to ensure that educators were adequately trained to teach this new ICT-based curriculum effectively.

More so, institutions have neither offered educators training and retraining opportunities nor have they taken deliberate actions to ensure that educators personally upgrade their skills. Supporting the foregoing, Maduabuchi (2008) lamented that no institutional staff development programmes had been organised for OTM lecturers. Okoli, Ohaegbulam and Oduma (2011) carried out a research that revealed that OTM educators were ineffective in imparting ICT skills to their students. The reason behind this problem according to these researchers could be as a result of lack of knowledge of the practical use of these ICT skills. In the same vein, Azih (2011) states that it is imperative to note that currently there is a high demand for competent and technologically trained workers. Regrettably, most OTM graduates acquired theoretical knowledge which does not match well with the demands of the twenty-first century workplace.

Consequent upon the foregoing, most of the ICT related courses offered in OTM programmes at the polytechnics are still being handled by lecturers of the Computer Science Department, who as a matter of fact are deficient in the methodology, principles and ethical know-how of integrating these ICT skills into the professional development of OTM students; a situation that has no doubt continued to have negative impact on OTM graduates. In view of the foregoing, it is unfortunate to note that only minimal impact of the reviewed curriculum has been felt as graduates of the programme reportedly have had to be retrained in these self-reliance ICT skills after graduation in order to be proficient in them. Indications from previous studies point to the fact that graduates are not adequately prepared in these ICT skills which have the potential to equip them with the capacity to be economically productive and self-reliant (Hennemann & Liefner, 2010; Rasul & Mansor, 2013).

Most OTM educators regrettably only focus on theoretical knowledge which is insufficient to equip students with the necessary competencies for self-reliance along the line of their profession. The objectives of OTM programmes for self-reliance cannot be achieved in the face of grossly inadequate competent educators, as lack of skills in these self-reliance applications have limited the effective teaching of these courses (Folorunso & Taiwo, 2018; Agboola, 2015; Oladunjoye, 2016).

This lack of ICT skill competencies among OTM educators, if not promptly addressed, would jeopardise all the efforts made in terms of the review of the curriculum and the continued huge government investment in the programme. Therefore, the crux of this work is to find out the specific skill areas in which OTM educators lack competencies in polytechnics in Kogi State with a view to proffering solutions. This study therefore seeks to appraise the level of ICT competencies possessed by OTM educators for effective training of self-reliance skills in Polytechnics in Kogi State.



Objectives of the Study

The main objective of the study is to appraise the level of Information and Communication Technology competencies possessed by office technology and management educators for effective training of self-reliance skills in Polytechnics in Kogi State.

Specifically, the study sought:

- a. to find out the level of Microsoft Word application competency possessed by OTM educators for effective training of self-reliance skills in polytechnics in Kogi State;
- b. to determine the level of Microsoft Excel application competency possessed by OTM educators for effective training of self-reliance skills in polytechnics in Kogi State;
- c. to identify the level of Microsoft Access competency possessed by OTM educators for effective teaching of self-reliance skills in for effective training of self-reliance skills in polytechnics in Kogi State;
- d. to ascertain the level of Microsoft PowerPoint competency possessed by OTM educators for effective training of self-reliance skills in polytechnics in Kogi State;
- e. find out the level of competency possessed by Microsoft Publisher Application OTM educators for effective training of self-reliance skills in polytechnics in Kogi State; and
- f. to determine the level of internet skill competency possessed by OTM educators in Polytechnics for effective training of self-reliance skills in polytechnics in Kogi State.

Research Questions

In line with the specific objectives of the study the following research questions were raised to guide the study:

- a) To what level are office technology and management educators competent in Microsoft Word application for effective training of self-reliance skills in the Polytechnics in Kogi State?
- b) What is the level of competency of office technology and management educators in Microsoft Excel application for effective training of self-reliance skills in the polytechnic?
- c) To what level are office technology and management educators competent in Microsoft Access application for effective training of self-reliance skills in the Polytechnics in Kogi State?
- d) What is the level of competency of office technology and management educators in Microsoft PowerPoint application for effective training of self-reliance skills in the Polytechnics in Kogi State?
- e) To what level are office technology and management educators competent in Microsoft Publisher application for effective training of self-reliance skills in the Polytechnics in Kogi State?



- f) What is the level of competency of office technology and management educators in internet skills for effective training of self-reliance skills in the Polytechnics in Kogi State?

CONCEPTUAL FRAMEWORK

Microsoft Word is a word processing application which is capable of performing tasks similar to a typewriter. It has the ability to type and produce textual documents, manipulate text, sentences, paragraphs, store and retrieve text and get printed text. It has automated functions that checks for spellings and grammar and various file types like pictures, tables, charts and graphical design could be merged with name and address list (Okoliye, 2015).

Microsoft PowerPoint is a versatile presentation application designed by Microsoft. Presentation softwares are utilised when creating multimedia files like charts, graphs, tables, pictures, videos, audios and other non-text documents. Krizo (2014) defines PowerPoint as a presentation software bearing a collection of individual slides that holds information on a given topic. Commonly, it is used in business meetings, seminars, conferences, training, capacity building, workshops and for educational purposes.

Microsoft Excel is a spreadsheet application designed for the purpose of collecting, analysing and storing data in a tabular form. Nnorom (2011) describes Microsoft Excel as one of the widely used spreadsheet applications. It can be used to perform both elementary and complex mathematical operations. Microsoft Excel also provides the means to convert the spreadsheet data into charts for easy comprehension.

Microsoft Publisher, also referred to as desktop publishing software, is used with the aid of the computer to create documents that have the combination of text and graphics. The application makes it possible to create pamphlets, handbills, reports, advertising materials, among others at cost effective rates with print quality similar to that of typeface printed materials. Ndinechi and Ementa (2013) note that desktop publishing is an application software that enables one to combine text and graphics in order to produce typeset quality documents, such as newsletters, flyers, brochures, magazines and so on. The desktop publishing application can also be used by office managers to produce textual files for printing purposes.

Microsoft Access which is a subset of Microsoft office applications is a kind of database management system (DBMS) developed by Microsoft Corporation to enable data integrity, independence, shareability, consistency and non-redundancy. It is an application used to collect and organise interrelated files. It is a system of collating data, facts and figures for the processing of information and generation of reports for decision making. The use of Microsoft Access enables one to easily store and access data and create reports from storage media for use when required in an organisation for prompt decision making.

The internet is a worldwide network of computers. It is the global connection of millions of computers in a single network. This connection allows people to share information like data, programs, pictures, video, music, etc. thereby facilitating communication.

Concept of ICT Competency



Competency means knowledge, know-how, skills, attitudes, and judgments necessary to successfully carry out a task (Ajie-Uche & Jumbo, 2016). In the same vein, Akarahu and Baba (2011) sees competency as the ability to do something well. Competency could also be seen as key knowledge and skills acquirable in a field of learning which professionals in that field of endeavour should acquire to be able to display a high level of acquisition and function (Osinem & Ugwoke, 2011). On the whole, it could be deduced that competency has to do with the possession of some form of skills, experiences, abilities, attributes, attitudes, knowledge, among others needed to carry out a particular task or perform a certain duty/job effectively.

ICT competency can be said to be a group of skills, knowledge and attitudes that are applied to the use of information and communication technology systems as well as the devices that the activity involves (Gastelu, Kiss & Dominguez, 2014). Thus, it could be seen as an observable behaviour, a demonstration of one's ability to effectively use ICT for the successful completion of a task.

Concept of Self-reliance

Ofoye and Asarah (2010) define self-reliance as the autonomy of decision-making and full mobilisation of a society's own resources. In the views of Umoru and Nnaji (2015), self-reliance is the individual's ability to set up a business of his own instead of working for another person. They add that, it is the ability for independent decision making. In the same vein, self-reliance means having the ability to do things for oneself rather than having things done for one (Mkonongwa, 2013).

In a nutshell, self-reliance refers to the reliance on one's capabilities; knowledge, skills, competencies, abilities to improve life or an individual depending on their own resources; skills, competencies, knowledge, etc. for economic gains instead of being an employee.

Information and Communication Technology

ICT is also defined as computer based tools used by people to work with information and communication processing needs of an individual or an organisation. It encompasses the computer, its hardware and software, the network and several other devices that convert information (text), images, sounds and motion and so on into common forms (Okute, 2010). From these definitions, ICT could therefore be seen as the processing and sharing of information using all kinds of electronic devices, an umbrella that includes all technologies for the manipulation and communication of information.

Effective Training

Training is an active process in which a person that possesses mastery in a skill imparts to others to bring about proficiency in that skill area. Thus, it is crucial to ensure that OTM educators have the skills and experiences necessary to provide students with effective instructions in a manner that allows for content mastery (Azar, 2022). The most effective training is that which results in mastery. Training can be said to be effective when an instruction is explicitly engaging, clear, takes cognizance of individual differences and ultimately leads to the learner's success. This suggests that the only way to improve learners' outcome is to improve instruction (Tinio, 2002).



Self-Reliance Opportunities Available to OTM Students who possess High Competencies in ICT skills

There are a number of opportunities available to OTM students who have proficiency in ICT skills aside from being employed by government or private organisations. Among these opportunities is the operation of business centres. Business centres exist everywhere and have contributed immensely in creating self-employment for youth proficient in Microsoft word applications. Even where an individual cannot afford to rent a space, with a computer and a printer, a serious minded graduate could move around business areas to collect typing jobs then return home to work on them and deliver. OTM graduates can maximise this economic opportunity while curbing unemployment and at the same time contributing to the nation's economic development (Ugwanyi, 2011; Akwa, Nimfel & Nguwap, 2018).

Secondly, graduates of the programme could establish computer training centres being another economic opportunity open to Microsoft PowerPoint application competent OTM graduates. Effective computer presentation skill is now an essential requirement expected of everybody in the present day business environment. Competencies acquired in presentation offer the recipient a good opportunity to establish computer training centres with which they can in turn help to train others who are deficient in these skills (Ugwanyi, 2011; Awak et al., 2018). Hence, graduates and professionals in other fields who desire to acquire presentation application skills could be adequately trained by OTM graduates.

According to Braimoh and Ovbiagele (2013), competency in Microsoft Excel is relevant to OTM graduates who wish to set up businesses of their own through entrepreneurship ventures where the competencies acquired can be put to good use to earn a living without searching for the elusive white collar jobs. Similarly, Awak, Nimfel and Nguwap (2018) opine that Microsoft office skills (Microsoft Excel inclusive) are needed for self-employment and lack of competencies in these applications could deter OTM graduates from embarking on business opportunities available to him/her. Spreadsheet application equips OTM graduates with knowledge of data entry, processing and analysing skills. Competencies in these courses therefore offer self-reliance opportunities by providing data analysing and processing services to organisations, institutions, companies and the public in general.

Thirdly, opportunities in Information Technology (IT) consultancy are equally open to OTM graduates who can demonstrate a high level of competencies in Microsoft Excel applications. Graduates can establish and manage consultancy outfits to assist growing firms, nongovernmental organisations and government agencies to establish electronic office and data management procedures (Ugwanyi, 2011; Awak et al., 2018).

In addition to the above mentioned, high competency in desktop publishing equips and qualifies office managers to become desktop publishing professionals who could establish and run desktop publishing centres where the production of items, such as invitation cards, headed papers, business cards, brochures, certificates, among others can be produced for individuals, governments, corporate organisation, and so on (Habila, 2013; Ezeahurkwe & Ameh, 2017).



THEORETICAL FRAMEWORK

The study leaned on the 1908 Trait and Factor theory by Frank Parsons. The theory is also known as the matching theory. Parsons' core concept was that of 'matching'. The key assumption of the theory is that, both individual skills and the attributes needed in specific jobs could be measured to determine a 'good fit'. Productivity is at its highest when individuals are employed to work where their abilities correspond with the requirements of the job. He believes that matching an individual's competencies with the conditions for success in identified fields would yield greater work satisfaction and success.

Trait and Factor theory is relevant in the appraisal of ICT competencies possessed by OTM educators for the training of self-reliance skills, in the sense that, these educators are expected to possess certain levels of competencies in ICT skills for effective training of OTM students. Thus, without the possession of these competencies in the required levels, the expected effective teaching and learning would not be achieved.

METHODOLOGY

The descriptive survey research method was adopted for the study. This research design is seen to give a remarkably accurate picture of a phenomenon (Nworgu, 2015). Descriptive research design is considered ideal for this research work as it helps the researchers to appraise the level of ICT competencies possessed by OTM educators for effective training of OTM students in self-reliance skills. The population of the study was made up of all the OTM academic staff drawn from the Federal Polytechnic, Idah and Kogi State Polytechnic, Lokoja. As indicated in Table 1 below, a total of 24 OTM educators formed the sample size for the study. The instrument used for data collection was a structured questionnaire titled: Appraisal of the Level of Information and Communication Technology Competencies Possessed by Office Technology and Management Educators for Effective Training in Self-Reliance Skills in Kogi State (ALICTPOTMEETSS). The instrument provided responses to the six research questions with 73 items on a 4-point rating scale of: Very High Level, (4-points), High Level (3-points), Low Level (2-points) and Very Low Level (1-points) were used for items 3 - 73. The data collected were analysed using mean ratings with standard deviations to answer research questions 1-6. The decision rule is that any item with the mean rating of 2.50 and above were considered high competency while items with mean rating of 2.49 and below were considered low competency.

Table 1: Population for the Study

Name of Institutions	Male	Female	Total
Federal Polytechnic, Idah	5	8	13
Kogi State Polytechnic, Lokoja	3	8	11
Total	8	16	24

Source: *Figures obtained from Heads of Department of Office Technology and Management of the various Polytechnics (2023).*



Research Question 1

To what level are office technology and management educators competent in Microsoft Word application for effective training of self-reliance skills in the Polytechnics in Kogi State?

Table 2: Mean and Standard Deviation of Level of Microsoft Word Application Competencies Possessed by Office Technology and Management Educators for effective training and learning of Self-Reliance skills in Polytechnics in Kogi State (N=24)

Items	Microsoft Word Competencies Possessed	\bar{x}	SD	Remarks
1	Ability to Loading MS Word	3.94	0.40	HL
2	Ability to Save Documents on the Desktop	3.90	0.62	HL
3	Ability to Open Existing Documents	3.34	0.42	HL
4	Ability to Insert Tables	3.20	0.83	HL
5	Ability to Add New Row/Column to Tables	3.19	0.93	HL
6	Ability to Delete Column/Row	3.20	0.72	HL
7	Ability to Copy and Paste text	3.52	0.88	HL
8	Ability to Insert Page Number	3.34	0,64	HL
9	Ability to Change Paper Orientation	3.26	0.70	HL
10	Ability to Apply Bullets	3.56	0.63	HL
11	Ability to Insert Symbols	3.43	0.83	HL
12	Ability to Insert Clipart	3.24	0.54	HL
13	Ability to Insert Word Art	3.22	0.57	HL
14	Ability to Find and Replace	3.34	0.42	HL
15	Ability to Print documents	3.68	0.88	HL
	Grand weighted mean	3.42	0.66	HL

Source: Field Study, 2022.

The data presented in Table 2 indicates that 15 out of the 15 listed items have mean scores ranging from 3.19 – 3.90. This implies a Very High Level rating. The standard deviation ranged within 0.42 - 0.93 which shows that respondents were homogenous in the items. The foregoing implies that respondents possessed a very high level competence in Microsoft Word application for effective training of self-reliance skills in the Polytechnics in Kogi State.

Research Question 2

What is the level of competency of office technology and management educators in Microsoft Excel application for effective training of self-reliance skills in the polytechnic?



Table 3: Mean and Standard Deviation of Level of Microsoft Excel Application Competencies Possessed by Office Technology and Management Educators for effective training and learning of Self-Reliance skills in Polytechnics in Kogi State (N=24)

Items	Microsoft Excel Competencies Possessed	\bar{x}	SD	Remarks
1	Ability to Launch MS Excel	3.34	0.43	HL
2	Ability to Save Workbook	2.84	0.56	HL
3	Ability to Password Workbook	2.10	0.64	LL
4	Ability to Change Workbook Password	2.12	0.84	LL
5	Ability to Open New Workbook	2.54	0.52	HL
6	Ability to Open Existing Workbook	2.45	0.84	LL
7	Ability to Insert Worksheet	2.42	0.52	LL
8	Ability to Delete Worksheet	2.11	0.64	LL
9	Ability to Rename Worksheet Tab	2.40	0.20	LL
10	Ability to Delete Cells	2.44	0.42	LL
11	Ability to Apply Autosum	2.42	0.34	LL
12	Ability to Set Automatic Calculations	2.36	0.55	LL
13	Ability to Print Worksheet	2.80	0.54	HL
14	Ability to Insert Chart on Worksheets	2.32	0.76	LL
15	Ability to Resize Column/Row Size	2.76	0.32	HL
	Grand weighted mean	2.50	0.54	HL

Source: Field Study, 2022.

Research Question 3

To what level are office technology and management educators competent in Microsoft Access application for effective training of self-reliance skills in the Polytechnics in Kogi State?

Table 4: Mean and Standard Deviation of Level of Microsoft Access Application Competencies Possessed by Office Technology and Management Educators for effective training and learning of Self-Reliance skills in Polytechnics in Kogi State (N=24)

Items	Microsoft Access Competencies possessed	\bar{x}	SD	Remarks
1	Ability to Load MS Access	3.20	0.34	HL
2	Ability to Open Existing Database	2.46	0.64	LL
3	Ability to Create a Database	1.94	0.72	LL
4	Ability to Create Tables in Design View	2.36	0.44	LL
5	Ability to Create Tables using Wizard	2.39	1.08	LL
6	Ability to Create Tables by Entering Data	1.92	0.98	LL
7	Ability to Sort Records	1.74	0.64	LL



8	Ability to Create Table Relationship	1.64	0.48	LL
9	Ability to Set Primary Key	1.86	0.65	LL
10	Ability to Create Backup for Database	1.66	0.82	LL
Grand Weighted Mean		2.11	0.68	LL

Source: Field Study, 2022.

Research Question 4

What is the level of competency of office technology and management educators in Microsoft PowerPoint application for effective training of self-reliance skills in the Polytechnics in Kogi State?

Table 5: Mean and Standard Deviation of Level of Microsoft PowerPoint Application Competencies Possessed by Office Technology and Management Educators for effective training and learning of Self-Reliance skills in Polytechnics in Kogi State (N=24)

Items	Microsoft PowerPoint Competencies possessed	\bar{x}	SD	Remarks
1	Ability to Launch MS PowerPoint	3.02	0.24	HL
2	Ability to Open Existing PowerPoint	2.52	0.43	HL
3	Ability to Select Slide designs	2.48	0.56	LL
4	Ability to Change Slide Backgrounds	2.34	0.86	LL
5	Ability to Insert Tables	2.68	0.62	HL
6	Ability to Save Presentations	2.88	0.32	HL
7	Ability to Insert Cliparts	2.42	1.04	LL
8	Ability to Insert Word Arts	2.46	1.08	LL
9	Ability to Insert Pictures	2.48	1.32	LL
10	Ability to Run Slideshows	2.59	0.43	HL
11	Ability to Delete Slides	2.88	0.64	HL
12	Ability to Apply Animations	2.52	0.65	HL
Grand Weighted Mean		2.60	0.68	HL

Source: Field Study, 2022.

Research Question 5

To what level are office technology and management educators competent in Microsoft Publisher application for effective training of self-reliance skills in the Polytechnics in Kogi State?



Table 6: Mean and Standard Deviation of Level of Microsoft Publisher Application Competencies Possessed by Office Technology and Management Educators for effective training of Self-Reliance skills in Polytechnics in Kogi State (N=24)

Items	Microsoft Publisher Competencies Possessed	\bar{x}	SD	Remarks
1	Ability to Load MS Publisher	3.48	0.34	HL
2	Ability to Save Publications	2.68	1.04	HL
3	Ability to Import Text	2.32	0.67	LL
4	Ability to Create Text Columns	2.12	0.86	LL
5	Ability to Create New Master Page	2.44	0.34	LL
6	Ability to Find and Replace Text	2.46	1.62	LL
7	Ability to Create Drop Cap	1.88	0.32	LL
8	Ability to Change paragraph spacing	2.24	0.56	LL
9	Ability to Insert Table	2.26	0.34	LL
10	Ability to Create Graphics	2.38	0.28	LL
11	Ability to Insert Word Art	2.26	1.24	LL
12	Ability to Print Publication	2.84	0.34	HL
Grand Weighted Mean		2.44	0.66	LL

Source: Field Study, 2022.

Research Question 6

What is the level of competency of office technology and management educators in internet skills for effective training of self-reliance skills in the Polytechnics in Kogi State?

Table 7: Mean and Standard Deviation of Level of internet skills Competencies Possessed by Office Technology and Management Educators for effective training of Self-Reliance skills in Polytechnics in Kogi State (N=24)

Items	Internet Skills Competencies possessed	\bar{x}	SD	Remarks
1	Ability to browse and download information from the internet	3.76	0.48	HL
2	Ability to transfer data and information	2.68	0.32	HL
3	Ability to create an email account	2.84	0.21	HL
4	Ability to send and receive mails	2.98	0.26	HL
5	Ability to create product awareness through the internet	2.20	0.63	LL
6	Ability to create an online sales outlet	2.34	1.04	LL
7	Ability to set up a social media marketing platform	2.20	1.02	LL
8	Ability to set up an automated online survey	2.54	0.24	HL
11	Ability to design a website	1.86	0.28	LL
Grand Weighted Mean		2.12	0.41	LL

Source: Field Study, 2022.



DISCUSSION OF FINDINGS

The findings in Tables 1, 2 and 4 revealed that OTM educators possessed high competencies in Microsoft Word, Microsoft Excel and Microsoft PowerPoint. The findings are in agreement with the views of Okoro and Ndinechi (2013), who indicates that OTM lecturers were competent in the area of word processing skills. The results of the findings are quite in consonance with the investigations carried out by earlier researchers which reveal that OTM graduates possessed high competencies in Microsoft Word, Microsoft Excel and Microsoft PowerPoint (Siddiquah & Salim, 2017; Duktur, 2019; Okolocha & Olaniye 2015; Mawutorwu, Ebenezer, Frank & Robert, 2016). Thus, it could be extrapolated that the competency of the students resulted from the level of competency possessed by OTM educators who imparted the skills.

On the other hand, the findings on Tables 3, 5, and 6 showed that respondents possessed low competencies in Microsoft Access, Microsoft Publisher and Internet skills. This finding agrees with the study of Okoro (2014) which indicates that OTM lecturers consider themselves fairly competent in desktop publishing. More so, Agboola (2015) and Oladunjoye (2016) assert that the objective of OTM programme for employability and self-reliance cannot be achieved in the face of gross inadequate competent educators, as lack of competencies in office applications have limited the effective impartation of Microsoft office competencies. In like manner, Nwaokolo (2014) laments that only the theoretical aspects of office application are taught leaving out the practical aspect, a situation that leaves students half-baked and incompetent in ICT skills.

CONCLUSION

Based on the discussion of findings of the study, it was therefore concluded that office technology and management (OTM) educators were highly competent in three out of the six ICT skills. However, high competencies in all these ICT skills is a necessary precondition for quality training which would produce graduates with high proficiency leading to self-reliance. Therefore, the current situation could give rise to half-baked graduates who would be unable to sufficiently fend for themselves economically without paid employment.

RECOMMENDATIONS

Based on the findings and conclusion of the study, the researchers recommend the following:

1. OTM educators should be trained and retrained in Microsoft Access, Microsoft Publisher and internet skills for effective quality instructional deliveries.
2. Even though they possess high competency in Microsoft Word, Microsoft PowerPoint and Microsoft Excel, they should endeavour to upgrade their skills in the emerging versions of these applications in order to be up-to-date.



Acknowledgments

The researchers are grateful to the Tertiary Education Trust Fund (TETFUND) for sponsoring this research work. The researchers appreciate the corrections, suggestions and constructive criticisms of Dr. Emmanuel Y. Attah for endeavouring to carry out a peer review on this paper.

REFERENCES

- Agboola, J. O. (2015). Critical challenges confronting business education programmes in contemporary Nigeria. *Nigeria Journal of Business Education*, 2(3), 1-13.
- Agholor, S. I. (2019a). Entrepreneurial skills needed for self-employment by office technology and management graduates of polytechnics in Nigeria. *International Journal of Business Management and Advance Research*, 1(1), 1-7.
- Agholor, S. I. (2019b). Office technology and management educators' self-appraisal on information and communication technology competencies. *International Journal of Advanced Academic Research of Social and Management Science*, 5(5), 7-15.
- Ajie-uche, G., & Jumbo, P. D. A. (2016). Information and communication technology competencies required by lecturers for the realisation of the objectives of business education in Nigeria. *Nigeria Journal Business Education*, 3(1), 237-248.
- Akarahu, C. U., & Baba, E. I. (2011). Entrepreneurship competencies required by office education graduates for self-sustainability in colleges of education in south-east, Nigeria. *Nigeria Vocational Association Journal*, 16(1), 22-30.
- Awak, C. J., Nimfel, T., & Ngwuap, S. (2018). Information and communication technology skills needed by office technology and management students for self-sustenance and national development. *Nigerian Journal of Business Educators in Nigeria*, 5(1), 206-213.
- Azih, N., & Ama, F. N. (2019). Computer system operating skills required by lecturers for effective implementation of the OTM curriculum in polytechnic in the South-East. *Nigerian Journal of Business Education*, 6(2), 226-236.
- Azar, G. (2022). Instructional delivery. Retrieved from azar.step.hollins.edu on 12/08/22
- Azih, N. (2011). Resources provision for implementation of office technology and management programs in federal polytechnics in the South-Eastern States. *Journal of Association of Business Education in Nigeria Delta State Chapter*, 1(6), 46-49.
- Braimoh, M. Z., & Ovbiagele, A. O. (2013). Skills gaps: a challenge to the implementation of Office Technology and Management in Auchu polytechnic. *Journal of Information and Communication Technology*, 1(1), 27-36.
- Duktur, S. L. (2019). Competencies in the use of information and communication technology (ICT) among final year undergraduate business education students in tertiary institutions in North-Eastern Nigeria. *Nigerian Journal of Business Education*, 6(2), 304-315.
- Ezeahurkwe, N. L., & Ameh, A. O. (2016). Entrepreneurial opportunities in office technology and management programme a panacea for youth unemployment. *Nigerian Journal of Business Education*, 3(1), 134-142.
- Folorunso, I. O., & Taiwo, O. A. (2018). Business education and national development: issues and Challenges. *Nigerian Journal of Business Educators*, 5(2), 274-285.
- Gastelu, C. A. T., Kiss, G. & Dominguez, A.L. (2014). Level of ICT Competencies at the university. *Procedia Social and Behavioural Sciences*, 174 (2015), 137-142



- Habila, S. (2013). Office technology and management: a catalyst for students' self-reliance. <https://sundayhabila.wordpress.com/2013/05/21/office-technology-and-management-a-catalyst-for-students-self-reliance/>.
- Hennemann, S., & Liefner, I. (2014). Employability of German geography graduates: the mismatch between knowledge acquired and competences required. *Journal of Geography in Higher Education*, 34(2), 215-230. doi:10.1080/03098260903227400.
- Krizo, P. (2014). Definition of a PowerPoint presentation. <http://www.ehow.com/eHow/computers>.
- Mawutorwu, D., Ebenezer, M. A., Frank, K. A. A., & Robert, K. (2016). Lack of competence in using Microsoft Excel by accounting students. *Global Journal of and Management Perspective*, 5(4), 39-42.
- Mkonongwa, L. (2013). Academic staff's access and use of technological tools: a challenge to blended learning implementation in Tanzania's tertiary institutions. *Journal Of Education Humanities And Science*, 2(2), 34-42.
- Ndinechi, G. I., & Ementa, C. N. (2013). Business education students' rating of the teaching of word processing and desktop publishing skills in tertiary institutions in South-East, Nigeria. *Nigerian Journal of Business Education*, 1(2), 75 – 82.
- Nnorom, E. O. (2011). Competencies needed by office technology and management graduates for self-employment in the era of information and communication technology. *A seminar paper presented to the department of business education, Ebonyi State University, Abakaliki*.
- Nwaokolo, P. (2014). Recent experiences in educational alternatives in Africa. The post-primary technology education Case. Related Thoughts in Vocational Education. The Developing World Experience, 116 – 128.
- Nwazor, J.C. & Nwaukwa, F.C. (2015) Towards more effective vocationalisation of business education in universities in South East of Nigeria. *Journal of Education and Practice* Copus ID: 53644055.
- Nworgu, B. G. (2015). *Educational research: Basic issues and methodology* (3rd ed.). Nsukka: University Trust Publishers.
- Nwosu, B. O., & Mbaezue, A. N. C. (2016). PowerPoint competences required of Office technology and management lecturers in south-east geopolitical zone of Nigeria for efficient adaptation of the emerging methodologies: *Nigerian Journal of Business Education*, 3,1.205-216.
- Maduagbuchi, I.(2008) A critique of the new curriculum of office technology and management. *Business Education Journal* 6(2) 209-220
- Ofoye, O. I., & Asarah, M. (2010). Skills Acquisition through Fine and Applied Arts in Nigeria. *Problem and Prospects*, 6 (1), 139-145.
- Oladunjoye, G. T. (2016). Optimizing business education for national development; *Nigeria Journal of Business Education*, 3(1), 1-16
- Okoli, B. E. Ohaegbulam, N. M. & Oduma, C. A. (2011). Re-engineering the business education curriculum for the new teachers' effectiveness in Nigeria. *Journal of Curriculum Studies* 16 (3)42-47.
- Okolije, E. O. (2015). Knowledge, accessibility and use of information communication technology (ICT) among students and teachers in the department of nursing sciences university of Nigeria, Enugu campus a masters dissertation of the department of nursing sciences faculty of health sciences and technology university of Nigeria Enugu. <http://repository.unn.edu.ng/bitstream/handle/123456789/2041/Okolije%20Euchar%20Okwudili.pdf?sequence=1&isAllowed=y>.



- Okolocha, C. C., & Olaniye, V. E. (2015). Supervisors assessment of computer-based competencies possessed by secretaries in government ministries in Delta State of Nigeria. *International Journal of Management Sciences*, 5(12), 467-475.
- Okoro, O. B. (2014). Assessment of ICT competencies possessed by polytechnic OTM Lecturers in south-south Geo-political zone of Nigeria. *International Journal of Science and Research (IJSR)*, 6(7), 78-85.
- Okoro, B. O., & Ndinedu, O. (2013). Information and communication technology competences possessed polytechnic OTM lecturers in south-south Nigeria. *Journal of Vocational and Adult Education*, 1(3), 1-7.
- Okute, L. A. (2019). Challenges of teacher preparation in a knowledge economy in the E-era. *Nigerian Journal of Business Education* 6(1) 356-389
- Onyesom, M., & Ashigwu, N. (2018). Towards quality assurance in business education in Nigeria: constraints and control. *Asian Journal of Business Management*, 1(2), 360 -371.
- Osinem, E. C., & Ugwoke, C. (2011). Housing and feeding competencies required by retirees for success in production in Nsukka and Obollo-afor educational zones Enugu state. *Nigerian Vocational Association Journal*, 16(1), 53-60.
- Parsons, F. (1909). *Choosing a vocation*. Houghton: Mifflin.
- Rasul, M. S., & Mansor, A. N. (2013). Employability skills indicator as perceived by manufacturing employers, *Asian Social Science Journal*, 9(8), 42- 51.
- Siddiquah, A., & Salim, Z. (2017). The ICT Facilities, Skills, Usage, and the Problems Faced by the Students of Higher Education. *Journal of Mathematics Science and Technology Education*, 13(8), 4987-4994.
- Tinio, I. V. (2002). ICT in education: UN Development Programme
- Udoye, N. R. & Ndum, V. E. (2013) Reinvigorating business teacher education towards self-reliance in Nigeria. *Journal of Educational and Social Research* 3(9) 119-129.
- Ugwuanyi. M. O. (2011). A survey of entrepreneurship opportunities for office technology and management graduates in Nsukka local government areas of Enugu state, secretarial forum. *Journal for the Promotion, Advancement of Office Management /Secretarial Profession*, 6(1), 1-14.
- Umoru, T. A., & Nnaji, F. O. (2015). Utilizing new technologies in the preparation of business Education students for self-reliance. *Conference Proceeding of Business Education*, 2(1), 91-100.