



INFORMATION AND COMMUNICATION TECHNOLOGY WORK SKILL NEEDS FOR OFFICE TECHNOLOGY AND MANAGEMENT LECTURERS IN POLYTECHNICS IN NORTH CENTRAL STATES OF NIGERIA

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Abstract

The study presents the result of a survey which identified the ICT work skill needs for OTM lecturers in Polytechnics in North Central States Nigeria. The study was carried out using one hundred and four lecturers in Office Technology and Management Department in ten Polytechnics in North Central States of Nigeria. Three research questions and three hypotheses guided the study. Data was collected using structured questionnaire. The instrument was a four-point bipolar scales which was subjected to face validation and a reliability test with coefficients of 0.95 and 0.94 on both scales signifying that the instrument was reliable. Data collected was analyzed using mean and standard deviation, correlated t to answer the research questions, while One-way Analysis of Variance (ANOVA) was used to test the hypotheses at 0.05 level of significance. It was found that all the clusters in Desktop Publishing, Database Management, and Webpage Design are skill needs which require training by OTM lecturers in North Central States of Nigeria. This study also revealed that qualification was not a source of difference in the mean rating of OTM lecturers on desktop publishing, database management and webpage design. Based on findings, the following recommendations were made: OTM lecturers in all the polytechnics in North Central States of Nigeria should update their skills on desktop publishing through self development by attending courses mounted on desktop publishing by business centers. The management of the Polytechnics should from time to time liaise with experts and professional organizations to mount seminars and workshops for OTM lecturers to enable them update their skills on ICT based courses in the Polytechnics. Both federal and state governments should provide an enabling teaching and learning environment that support continuous growth and development of OTM lecturers. This can be achieved through in-service training for lecturers

Keywords: *ICT, Work skills, Office Technology and Management, Lecturers*

Introduction

Today's office environment is one of the places that experienced tremendous technological innovations. These innovations brought with them revolutionary changes in both the nature of office work, the role of lecturers and the expectations from secretaries. Consequently, business educators advocated for a new curriculum that would take care of the rapid technological explosion in the office. The advocacies to inject ICT courses into Secretarial Studies Curriculum in the polytechnics was necessitated by the fact that the skills, knowledge, and attitudes previously acquired in the course of study were inadequate to equip the graduates with computer skills needed for work in a modern office.

The outcome of the advocacies for a curriculum change in Secretarial Studies gave birth to Office Technology and Management (OTM) programme. Office Technology and Management was a brain child of the 2004 polytechnics curriculum review by the National Board for Technical Education (NBTE), and was designed to replace the Secretarial Studies programme which has been in operation since 1989. The new programme amidst several changes incorporates courses in ICT as against only word processing of two semesters in the old curriculum and undue emphasis on Shorthand and Advanced Transcription (Okoro, 2009).

Although the curriculum was good, there are issues with its implementation based on the view of Isyaku in Adelakin (2009) that one cannot talk about reforming the content of a curriculum without retraining the teachers and instructors involved in the teaching and learning process. Unfortunately, this was the case with the implementation of the OTM reformed curriculum content. The programme came with the challenge of new skills and competencies needed to be acquired by OTM lecturers. Braimoh and Ovbiagele in Azih and Ama (2019) noted that there are skills gap in the implementation of the OTM curriculum stating that we cannot embark on the mission of changing a programme without first of all re-



aligning the teachers and instructors through training as these teachers are involved in the different implementation phases of programme that is ICT based.

Information and communication technology involves the acquisition, dissemination, processing and storage of numerical, vocal, textual and pictorial information by a micro-electronic based combination of computing and telecommunications. Information and Communication Technology according to Ikelegbe cited in Omeje (2009), is all the modern systems for processing information and communication in data, text, image and voice. According to Omeje, it embraces all the technologies that support activities involving the creation of data, manipulation and communication of information including application. Similarly, Butcher in Omeje (2009) described ICT as electronic technologies for collecting, storing, processing and communicating information. The former definition given by Ikelegbe is adopted in this research. Computer is a tool in information and communication technology Therefore, lecturers teaching ICT courses in the Polytechnics in the North Central States must have indebt knowledge of computer, since all ICT courses are computer based. Computer is an electronic device capable of accepting data as input from its environment, processing such data to produce output (information) at a very high speed and with high degree of accuracy with little or no human intervention provided the enabling programme (instructions) are properly installed into the system and are functioning well (Oborah 2021).

Work skills are the competencies one need to perform tasks a job requires. Some refer to it as human skills or employability skills. Competence is the ability of a person to exercise or perform a job or task that is based on skills, knowledge and attitudes supported by work in accordance with the demands of the job. (Onah, 2018). Similarly, competency according to Agomuo in Ezeh (2018) is a compendium of knowledge, skills, value, attitude and behavior needed by an individual to perform his/her role efficiently. Okorie in Ezeh (2018) defined skill as the expertness, practical ability, dexterity and tact, proficiency exhibited and usually displaying a flexible but systematic patterning. Skills, therefore, refers to an established way of doing things expertly and with ease which is acquired rigorously through repetitive performance.

A lecturer is someone, who is professionally qualified to impart knowledge and stimulate learning formally in a classroom situation. Achimugu in Ezeh and Eze (2011), a lecturer is somebody grounded in his subject area and must necessarily possess basic teaching qualification which enables him to be appointed to teach in institutions of learning. Lecturer is the corner stone in every educational endeavour as no educational policy can be effective without adequate teacher preparation whose duty it is to implement the policy. This is why Njoku in Eze (2007) observed that of all the factors which influence the quality of education and contribution to national development, the quality, competence and the character of the teacher are undoubtedly the most significant. Hence the National Policy on education (2004) recognizes that no educational system can rise above the quality of its lecturers

Desktop publishing has been defined as the use of personal computers and the application software combining text and graphics to design hard copy layout and produce high quality document (Okpanachi 2008). Similarly Jimoh et al (2010) stated that desktop publishing is the use of a computer and specialised software to combine text and graphics to create document that can be printed on either a laser printer or a typesetting machine. The finished product is then transferred to a page-makeup programme which is the actual software most people think of as the actual desktop publishing software. These programmes enable the user to layout text and graphics on the screen and see what the results will be (Jimoh, Adamu, Palladan, Michael, & Yunana, 2010). As a final step according to Williams and Sawyer (2010), the printed copy is used primarily to get an advance look before the completed job is sent to a typesetter service bureau for even higher quality output.

The design objective of any desktop publishing must be to achieve a unique publication that looks attractive and easy to read. Jimoh et al (2010) stated that whatever type of publication one is producing should have a consistent framework for the contents of each page and each section of the document and that the choice of layout within margins, character, size and type should be governed by the need to provide maximum legibility at a reasonable cost. A grid result is a decision you make about left/right margins, top/bottom margins, number of columns, width of columns, spacing between columns, headers and footers and page numbering. According to Jimoh et al (2010) all good design which is often referred to as a template has an underlining grid which helps to establish rules for placing elements, build pleasing proportions and also form unity which is important with multi-pages publications that needs an underlying structure. They outlined ten basic steps to doing desktop publishing. These include: have a plan; make a sketch, choose a template; set up your document; place text in your document; format your text; place graphics in your document; tweak your graphics placement; move your graphics around so that they line up



the way you want it; apply the rules of desktop publishing; and print a draft and proofread it and then print your project.

Computer-based database management systems, are rapidly replacing the paper-based filing system that workers used in the past to locate information. According to Morley and Parker (2007), a database is a collection of related data that is stored on a computer and organized in a manner enabling information to be retrieved easily as needed. For instance, a collection of employees' records containing information on their personal data like name, date of birth, date of first appointment, present rank, salary, designation, work experience among other, is an employee's database.

Just as files can be organised in different ways, so can database management systems. According to Williams and Sawyer (2010), databases are organized into models such as hierarchical, network, relational, object oriented and multidimensional models. Williams and Sawyer stated that in a hierarchical database, field or records are arranged in related groups resembling a family tree, with child (lower level) records subordinate to parent (higher level) records. The parent record at the top of the database is called the root record or root parent.

In creating a database, Williams and Sawyer (2010) posited that it is always necessary to decide what information one wants to store in the database and what type of format one wants for the information. Jimoh et al (2010) enumerated the steps in designing a database to include: determining the purpose of your database; determining the tables you need; determining the field you need; identifying the field or fields with unique values in each record; determining the relationships between tables; refining your design and entering data and creating other database objects. According to Morley and Parker (2007), most databases are organized into fields, records and files. They posited that a field is a single type of data such as a person's name or telephone number to be stored in a database, a record commonly called a row is a collection of related fields for example Identity number, name, address. A table is a collection of related rows like all students address data, and all students' grade data. Jomoh et al (2010) stated that a record is created when the format is filled out for a single person or thing on a list. According to Alozie and Nnorom (2015), records can be quickly located by querying and displaying, stating that this helps to have access to records. They stated that database has the ability to put search results to use after querying, sorting, and analyzing the records and fields. They added that a record is generated when each person's or thing's information is entered into the field of a blank format. It is important that OTM lecturers adequately possess skills in database management to enable them equip students with skills in database management.

A web page is a document or resource information that is suitable for the World Wide Web and can be accessed through a web browser and displayed on a monitor or mobile device. The information on a web page is usually in HTML or XHTML format and may provide navigation to other webpages via hypertext links. Webpage design refers to the art of creating, modifying and displaying the elements of webpage which are made up of text, graphics, movies, links, tables and forms. According to Powell (2000), a web design is a multidisciplinary pursuit that consists of four primary components: content, form, function and purpose. The fundamental unit of a web site is a page. In the simplest sense, a page is what appears in a browser window. One page equals one ULR and a user usually types in a URL and a document appears in the window. The heart and the soul of a web page is text. Powell (2000) stated that if your site relies heavily on text, the way you use text may significantly influence the user's experience.

Colours, images and backgrounds are used on the web to make sites more interesting to look at and also inform, entertain, or even evoke subliminal feelings in the user. According to Powell (2000) colour, are the building blocks of imagery, and the attention to colour will increase awareness of how images both affect us as web page users and are affected by web page designers. The use of background imagery in either a thoughtful or careless manner can make the difference between an outstanding site and an unusable one. On the web, the primary image formats are Graphics Interchange Format (GIF) and Joint Photographic Experts Group (JPEG). These formats are often supported actively by browsers and page designers are advised to use only GIF and JPEG images as these are the most commonly supported. According to Powell (2000) the two most common browsers are internet Explorer and Netscape's communicator. Others include Mozilla, Opera, American Online and WebTV. Almost inseparable from the browser is Hyper Text Mark-up Language (HTML), HTML is a language for describing web pages. HTML is a markup language and is a set of mark-up tags used in describing web pages.

Search engine optimization or (SEO) is useful for anyone building websites. SEO is affected by the way the HTML is written, the image quality and content as well as other things. There are three ways one can build a web page. These include the following: One way one can build a web page is through the use of a pre-made template or web design software. Secondly, one can use an HTML editor like FrontPage or Dreamweaver. HTML editors make building web pages feel like (to some certain extent) creating a



document in Microsoft word. Thirdly, one can hand-code his HTML in a text editor like Notepad. This means that you type in the HTML code yourself. This is the quickest way to learn how to build web pages and it is arguably the best way one can have the best control over what one is doing. The end point of web page design is web hosting. Web sites can be hosted using shared hosting or dedicated hosting.

Statement of the Problem

The National Board for Technical Education (NBTE) in 2004 carried out a review of Secretarial Studies Curriculum in Nigerian Polytechnics. The outcome of the review was a new curriculum that is Information and Communication Technology (ICT) based. This curriculum was meant to reflect the new trends in modern offices by introducing ICT courses which are adjudged to meet the ICT skill needs of modern secretaries into the curriculum. The ICT-based courses require the teachers to have good knowledge and skills of computer application.

However, many lecturers in OTM Department who had Secretarial skills at the point of entry lack computer skills that are now needed for effective teaching of ICT courses in the new curriculum. According to Ajayi in Uteh and Iheukwumere (2013), studies have shown that most teachers in OTM graduated before the era of ICT and argued that they are both professionally and academically incompetent to teach with ICT facilities. Thus, skills gap was created as a result of the curriculum review. Ngurukwem (2005) observed rightly that an audit of business teachers with ICT skills may reveal a shocking discovery that only very few teachers possess the needed skills. Ugwuanyi and Eze (2009) opined that the experienced senior lecturers expected to implement the OTM curriculum were not trained with modern equipment, and, this is why they are unable to teach ICT related courses effectively. Similarly Akwa (2009) observed a dearth of qualified lecturers in business courses in North Central States.

This gap contradicts the principles of vocational education, given that vocational education will be effective to the extent that instructor has had successful experience in the application of skills and knowledge to the operations and processes he undertakes to teach. The skill gap has, therefore, led to teachers producing graduates who are unemployable because they lack the requisite skills for working in a modern office environment. This gap can be closed when the OTM lecturers upgrade their computer skills. It is against this background that the researcher conceived this study to assess the computer skill needs of Office Technology and Management lecturers in teaching computer courses in North Central States Polytechnics.

Research Questions

The study is guided by the following research questions

1. What are the desktop publishing skill needs of OTM lecturers in Polytechnics in North Central States?
2. What are the database management skills of OTM lecturers in Polytechnics in North Central States?
3. What are the webpage design skills of OTM lecturers in Polytechnics in North Central States?

Null Hypotheses

1. Qualification is not a source of significant difference among lecturers of OTM on desktop publishing skills possessed in polytechnics in North Central States of Nigeria.
2. Qualification is not a source of significance difference among lecturers of OTM on database management skills possessed in polytechnics in North Central States of Nigeria.
3. Qualification is not a source of significance difference among lecturers of OTM on webpage design skills possessed in Polytechnics in North Central States of Nigeria

Methodology

Descriptive survey research design was used for this study. Gall, and Borg in Ezeh 2018 opined that a descriptive research is a method of data collection in which questionnaire or interview is utilized in collecting data from a sample that has been selected to represent a population to which the findings of the data can be generalized. The study was carried out in seven states polytechnics situated in Kogi, Niger, Benue, Kwara, Plateau, Nassarawa states and Federal Capital Territory. The population for the study comprised 104 Office Technology and Management lecturers from 10 Polytechnics in the North Central States of Nigeria. A structured questionnaire was used for data collection. The questionnaire consists of two sections: A and B. Section "A" is on the general information of the respondents while section "B"



consists of 21 structured questionnaire items on a 4 point bipolar rating scale as follows: Highly Important/Highly Possessed (4); Moderately Important/Moderately Possessed (3); Fairly Important/Fairly Possessed (2) and Not Important/Not Possessed (1). The items elicited information on the ICT work skill needs of OTM lecturers in North Central States of Nigeria. The instrument was subjected to face d validation by three experts from the Department of Business Education, University of Nigeria, Nsukka. The reliability of the instrument was established using Cronbach Alpha statistical tool to find out the internal consistency of the validated items. The instrument was administered to 20 respondents from IMT and Ossisatech Polytechnics, all in Enugu State. The reliability index for section B (Important Scale), cluster 1 was 0.93; cluster 2 was 0.97 and cluster 3 was 0.96. The overall reliability index of all the items in the important scale is 0.95, which shows a high degree of internal consistency. On the level of possession, the reliability index of cluster 1 was 0.94, cluster 2 was 0.95 and cluster 3 was 0.95. The overall index of all the items in the level of possession was 0.94, which shows a high degree of internal consistency. The instrument was administered to the respondents personally with the help of two research assistants. Out of 104 questionnaires distributed, 102 representing 98% were duly completed and returned. The data collected was analysed using mean and standard deviation. The ratings on the basis of the importance of the skill needs/level of possession of OTM lecturers are: Highly Important/Highly Possessed (4), Moderately Important/Moderately Possessed (3) Fairly Important/Fairly Possessed (2) and Not Important/Not Possessed (1). The boundary limit for interpreting the mean value of the items in the research questions were as follows: Highly Important/Highly Possessed – 3.50 – 4.00; Moderately Important/Moderately Possessed – 2.50 – 3.49; Fairly Important/Fairly Possessed – 1.50 – 2.49; and Not important/Not Possessed – 0.50 – 1.49. To determine the skills that are needed, the correlated t tests were computed using mean on the importance scale and level of possession. A skill is needed if the obtained t correlated coefficient showed either a weak (Coefficient of 0.00 – 0.30) or negative relationship at 0.5 level of significance. The three null hypotheses were tested using One-way Analysis of Variance (ANOVA). The confidence level was determined at 0.05. The null hypothesis was not rejected if the calculated F-ratio was less than the critical value but rejected where the calculated F-ratio was equal to or more than the critical value of F.

The results

Research Question 1

What are the Desktop Publishing skill needs of OTM lecturers in North Central States? Questionnaire items 1 - 5 were used to answer the research questions and presented in table 1

Table 1
Correlated t-test of the Mean Ratings of respondents on perceived importance and level of possession on desktop publishing skills possessed.

S/No		Importance		Level of Possession			
	Desktop Publishing skill Needs Statement	X₁	SD₁	X₂	SD₂	Correlated t	Remark
1	Create page design	3.86	.35	1.15	.36	-03	A need
2	Emphasize text	3.81	.39	1.03	.17	-01	A need
3	Import graphics	3.77	.42	1.03	.20	-09	A need
4	Create newsletters and Letterheads	3.73	.45	1.18	.38	-10	A need
5	Create magazines, books and brochures	3.72	.45	1.15	.36	.20	A need

The results in Table 1 reveals that all the desktop publishing skills listed are needed by OTM lecturers having obtained a correlation coefficient that shows either a negative or very weak relationship between the importance scale and the level of possession. The skills are create page design (-03), emphasize texts (-01), import graphics (-09), create newsletters and letterheads (-10) and create magazines, books and brochures (.20).

H₀₃ Qualification is not a significant source of difference in the mean responses of OTM lecturers in Polytechnics in North Central States on their desktop publishing skills possessed.



Table 2
Analysis of Variance (ANOVA) test on the mean ratings of respondents on Desktop Publishing skills possessed by OTM lecturers based on qualification

Source of diff.	Sum of Square	Df	Mean Square	F-ratio	Sig.
Btw. Group	2.439	2	1.220	3.110	.049
Within Group	38.816	99	.392		
Total	41.255	101			

Table 2 presents the summary of Analysis of Variance test of the respondents on the Desktop Publishing skill needs of OTM lecturers in Polytechnics in North Central States based on their qualifications. The table showed an F-ratio of 3.110 with table F as 19.48 at degree of freedom of 101 and 2 respectively at 0.05 level of significance. This shows that the hypothesis is not rejected implying that there is no significant difference among the three groups of lecturers on Desktop Publishing skills possessed.

Research Question 2

What are the database management skill needs of OTM lecturers in Polytechnics in North Central States? Questionnaire items 6 - 13 were used to answer the research question and presented in Table 3

Table 3
Correlated t-test of the Mean Ratings of respondents on the importance and level of possession of database management skills possessed.

S/No	Database management skill needs statement	Importance		Level of Possession			Remark
		X ₁	SD ₁	X ₂	SD ₂	Correlated t	
6	Set up database	3.81	.39	1.21	.41	.08	A need
7	Create tables	3.41	.66	1.15	.36	-06	A need
8	Create data capturing/data entry	3.68	.57	1.15	.36	.01	A need
9.	Set relationship between data	3.67	.72	1.01	.09	.05	A need
10.	Update data	3.58	.74	1.06	.24	.03	A need
11.	Create data security	3.57	.74	1.13	.36	.01	A need
12.	Generate report	3.72	.71	1.06	.24	-09	A need
13	Share data	3.55	.77	1.19	.39	.09	A need

The data presented in Table 3 shows that all the database management skills listed are skill needs having obtained a correlation coefficient that reveals either a negative or weak relationship between the importance rating scale and level of possession. The skills include: set up database (.08), create tables (-06), create date capturing/data entry (.01), set relationship between data (.05), update date (.03) create date security (.01), generate report (-09) and share date (.09)

H₀₄ Qualification is not a significant source of difference in the mean responses of OTM lecturers in Polytechnics in North Central States on the database skills possessed

Table 4
Analysis of Variance (ANOVA) test on the mean ratings of respondents on Database management skills possessed by OTM lecturers based on qualification

Source of diff.	Sum of Square	Df	Mean Square	F-ratio	Sig.
Btw. Group	2.291	2	1.146	1.129	.327
Within Group	100.464	99			
Total	102.755	101			

Table 4 presents the summary of Analysis of Variance test of the respondents on the Database Managements skill needs of OTM lecturers in Polytechnics in North Central States based on their



qualifications. The table showed an F-ratio of 1.129 with table F as 19.48 at degree of freedom of 101 and 2 respectively at 0.05 level of significance. This shows that the hypothesis is not rejected implying that there is no significant difference among the three groups of lecturers on Database Management skills possessed.

Research Question 3

What are the webpage design skill needs of OTM lecturers in Polytechnics in North Central States? Questionnaire items 14 - 21 were used to answer the research question and presented in Table 5

Table 5
Correlated t-test of the Mean Ratings of respondents on perceived importance and level of possession on webpage design skills possessed.

S/No	Webpage design skill needs statement	Importance		Level of Possession			Remark
		X ₁	SD ₁	X ₂	SD ₂	Correlated t	
14	Create a new webpage	3.76	.69	1.09	.41	-.01	A need
15	Add background colour and images	3.67	.72	1.12	.32	-.01	A need
16	Add font attributes	3.62	.73	1.12	.32	.12	A need
17.	Add HTML lists	3.53	.74	1.13	.36	-.11	A need
18.	Add Html Links	3.48	.74	1.09	.29	.05	A need
19.	Add HTML tables	3.33	.72	1.11	.31	-.20	A need
20.	Design forms	3.64	.58	1.16	.44	-.04	A need
21	Add HTML images	3.57	.59	1.12	.32	.01	A need

The result in Table 5 reveals that all the webpage design skills listed are needed having obtained a correlation coefficient that reveals either a negative or very weak relationship between the important rating scale and the level of possession. The coefficients showed significant at the level of 0.05. The skills are: create a new webpage (-01), add background colour and images (-01), add font attributes (.12) add HTML lists (-11), add HTML links (.05), add HTML tables (.20), design forms (-04) and add HTML images (-01).

H₀₅ Qualification is not a significant source of difference in the mean responses of OTM lecturers in Polytechnics in North Central States on their Webpage Design skills possessed.

Table 6
Analysis of Variance (ANOVA) test on the mean ratings of respondents on Webpage Design skills possessed by OTM lecturers based on qualification

Source of diff.	Sum of Square	Df	Mean Square	F-ratio	Sig.
Btw. Group	4.301	2	2.150	2.092	.129
Within Group	101.778	99			
Total	106.078	101			

The Analysis of Variance (ANOVA) presented in Table 6 above revealed an F-ratio of 2.092. The table F is 19.48 at Degree of Freedom 101 and 2 respectively at 0.05 level of significance. This shows that the hypothesis is not rejected, implying that there is no significant difference in the mean ratings of the OTM lecturers with HND, B.Sc. and Postgraduate qualifications on the Webpage Design skills possessed by OTM lecturers.

Discussion of Findings

The study sought to determine the ICT work skill needs of Office Technology and Management lecturers in Polytechnics in North Central States of Nigeria. The findings based on the analysis given show some corroboration with findings and views of some authors. These are discussed as follows.



On desktop publishing work skill needs, Table 1 contains the analysis of data. The result relating to the first research question shows that all the listed 5 desktop publishing skills are skill needs for OTM lecturers having obtained a correlation coefficient that revealed either a negative or weak relationship between the importance rating scale and the level of possession. The skills include: create page design, emphasize text, import graphics, create newsletters and letterheads and create magazines, books and brochures. The findings are consistent with the views of Williams and Sawyer (2010) who opined that the only way to disseminate the volume of information generated by organizations/institution to the end users is through publications in newspapers, magazines, newsletters, books among others. They stated that word processing alone cannot be used to produce and publish these materials to meet the acceptable standard and in order to remedy this deficiency, therefore, the need to combine text, graphics and other objects prepared in style, size and orientation on a printed page brought about the concept of desktop publishing.

The analysis of data on database management work skill needs of the respondents in Table 3 indicates that all the 8 skills identified are skill needs for OTM lecturers in Polytechnics in North Central States of Nigeria, having obtained a correlation coefficient that revealed either a negative or weak relationship between the important scale and the level of possession. The skills are: set up database, create tables, create data capturing/data entry, update data, create data security, generate report and share data. The findings corroborate the views of Trochilil (2016) who opined that database management is very important in driving organizations' mission and success. He maintained that many organizations employ data management managers whose functions include using the organizations' database and data to address the organizations objectives. The researcher is at home with Trochilil's view that since organizations are looking for skilled personnel who have database management skills, OTM lecturers should acquire database management skills in order to equip OTM students with database management skills before graduation.

Table 5 contains the analysis of the data on the webpage design work skill needs of OTM lecturers. The results relating to the third research question shows that all webpage design skills identified are skill needs for OTM lecturers having obtained a correlation coefficient that revealed either a negative or weak relationship between the importance rating scale and the level of possession. The skills include: create a new webpage, add background colour and images, add font attributes, add HTML list, Add HTML links, Add HTML tables, design forms and add HTML images. The findings are consistent with Powell (2000), who stated that there are skills one need to have to be successful in designing WebPages. Powell stated that knowledge of HTML is the most important thing a web designer need to know. The findings are also in agreement with Williams and Sawyer (2010) who believes that a webpage can be developed using a webpage design template. The template reduces the bulk load of learning java language and other related codes required for webpage development, thus enabling OTM lecturers integrate technology into classroom and bridge the gap between old pedagogy and modern approach to teaching and learning process.

The results also show that at 0.05 level of significance of 101 and 2 degree of freedom, there is no significant difference in the opinion of lecturers with HND, First Degree and Postgraduate Degree on desktop publishing, database management and webpage design skills in North Central States polytechnics. This is because the One-way Analysis of Variance computation for skills yielded F value which is less than the table value of 19.48.

Conclusion

The study was carried out to determine ICT work skill needs of Office Technology and Management lecturers in Polytechnics in North Central States of Nigeria. Data were collected, analyzed and interpreted. Based on the findings of the study, it was concluded that OTM lecturers in polytechnics should acquire desktop publishing, webpage design, and database management, skills outlined in this study in order to effectively teach the OTM courses that are ICT based as contained in the new curriculum introduced by National Board for Technical Education (NABTE).

Recommendations

Based on the findings and conclusion, the following recommendations were made.

1. OTM lecturers in all the polytechnics in North Central States of Nigeria should update their skills on desktop publishing through self development by attending courses mounted on desktop publishing by business centers.



2. The management of the Polytechnics should from time to time liaise with experts and professional organizations to mount seminars and workshops for OTM lecturers to enable them update their skills on database management.
3. The government of North Central States should equip their computer laboratories with necessary ICT facilities such as internet connectivity, interactive whiteboard among others to enhance the skills update of OTM lecturers on webpage design
4. The governments of North Central States should provide an enabling teaching and learning environment that supports continuous growth and development of OTM lecturers. This they can achieve through in-service training for lecturers.

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