



ADEQUACY OF EXPOSURE TO MODERN OFFICE TECHNOLOGY BY GRADUATING STUDENTS OF OFFICE TECHNOLOGY AND MANAGEMENT IN POLYTECHNICS IN IMO STATE

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Abstract

The study was designed to find out the adequacy of exposure to modern office technology by graduating students of office technology and management programme of polytechnic in Imo State. Three research questions guided the study one null hypothesis was tested at 0.05 level of significance. The population of the study consists of all the 32 office technology and management educators and 364 HND final year OTM students in polytechnics in Imo State Nigeria. Data was collected using a validated research questionnaire. Data relating to the research questions were analyzed using mean while t-test was using in testing the null hypothesis. The findings of the study revealed that graduating students of office technology and management programme were adequately exposed to modern office technology. It was therefore concluded that graduating students of office technology and management programme will be able to create easily, share and maintain data and files electronically for timely management decision making in any organization where their services may be required. It was recommended among others that Employers of labour should not hesitate to engage the service of graduates of office technology and management programme with full assurance that this crop of graduates are well packaged to deliver maximally to organizational goals and objectives.

Keywords: *Adequacy, Exposure, Modern Office Technology*

Introduction

The office technology and management programme was the product of the review of the old secretarial studies curriculum for producing office workers in Nigeria. The



review was taken with the view to produce graduates who could be efficient in management roles and have the confidence and practical skills necessary to put theory into action. This new Office Technology and Management programme has been described as having apparent advantages because of UNESCO assistance during the review. This introduced international perspectives to the curriculum and enabled it to benefit from some of the best practices around the world particularly, the office technology component which includes the convergence of computer, telecommunication, internet and information and communication competencies that are lacking in the various curricula for producing office workers in Nigeria.

This is in line with objective of the Federal Republic of Nigeria (FRN) (2014) which among others is the acquisition of appropriate skills, abilities and competencies, both mentally and physically as equipment for the individual to live and contribute to the development of the society. According to NBTE (2004), the objective of the OTM programme among others is to equip students with effective work competence to fit properly into the office of any organization and perform professionally the functions of a secretary which among others include relating the functions of the office to the whole organization, attending meetings, providing information as may be required, make accurate records of proceedings, filing and retrieving of information taking appropriate action independently when faced with challenging secretarial office problems, showing personal qualities and attributes conducive to tolerance and co-existence with the work group. Owing to the global contents of the curriculum, Nwabuona (2010) opined that the curriculum focus is on combining office information technical skills with adequate and relevant business knowledge in solving organizational problem; the target of which is to produce a hybrid of administrative professional to respond to the demands of dynamic and intensely computerized work place.

This is particularly important at this time in Nigeria where the curriculum for producing office workers is not quite adequate, relevant and functional to meet the test of time. Hallak in Njoku and Nwosu (2014) has pointed out that to meet the challenges of globalization, it would in fact appear necessary to prepare individuals for workplace where responsibilities are constantly changing, where vertical management replaced networking, where information passes through multiple and informal channels, where initiative-taking is more important than obedience and



where strategies are especially complex because of the expansion of markets beyond national borders. The author added that education must help individuals to perform tasks for which they were not originally trained, to prepare for a non-career path, to improve their team skills, to use information independently, to develop their capacity for improvisation as well as their creativity and finally, to lay the basis of complex thinking linked to harsh realities of practical life.

This implies that office technology and management students are expected to be equipped with relevant skills and competencies in information and communication technology and other electronic gadgets needed to function effectively in the global work environment. The Commission on Information and Communication Technology (2011) grouped information and communication technology competencies needed for effective training of office secretaries in the office in clusters of word processing, spreadsheet processing application, PowerPoint presentation, database management and internet application. Each of these areas of competency consists of a body of knowledge, skills and abilities which the office manager needs in order to be effective and efficient in office work. However, the curriculum grouped the above competency areas into ICT application, management information system, desktop publishing and webpage design. For instance, ICT applications cover the ability to use a word processor, create files and folders; use input devices to enter and edit texts accurately; manipulate information (opening, copying, cutting, pasting, saving and deleting files); preview, print and save documents among others. It also include using electronic spreadsheet processing application to organise and analyse data into lists and Tables. With spreadsheet application such as Microsoft Excel (MS Excel), information is easily displayed and people can insert formulas to work with data.

Management information system is another aspect of the curriculum that gives it a global picture. This course is intended to enable the students acquire the knowledge of data and information processing techniques and communication to all levels of management. Students should be able to understand systems analysis and design in a modern office. Through MIS, students are exposed to in-depth knowledge of office information system with particular emphasis to file creation, storage, management and manipulation. It is also intended to generate management reports using a modern computer software application system like Microsoft Access (MS Access). MS



Access provides security features that prevent unauthorized users from trying to gain access to confidential database information and loss of data in case of a system crash.

Furthermore, OTM graduates are expected to make great use of webpage design applications to carry out online office functions in modern business offices. The internet is a network in which users at one computer can, if they have permission, get information from another computer. It has the capacity of sending and receiving messages; and allowing people to stay in the comfort of their homes and transact immeasurable volume of businesses all over the world.

Unfortunately, the ICT facilities and applications for training of OTM students in many polytechnics in Nigeria seems to be grossly inadequate for OTM graduates to face the challenging demands of the new face of technology that keep unfolding ceaselessly. This seems to indicate that there is no relationship between job preparation in schools and on the job activities in the global seen. As offices globally are undergoing drastic changes on frequent basis owing to the emergence of ICT and related technologies, no organization, public or private working with these technologies would want to offer appointment to graduates of OTM without the relevant skills. Therefore the study sought to determine the adequacy of exposure to modern office technology received by graduating students of office technology and management in polytechnics in Imo State.

Statement of Problem

The introduction of office technology and management programme with emphasis on information and communication technology applications in instruction was intended to prepare qualified OTM global worker who can be socially acceptable, physical fit to accommodate any situation and technologically equipped to function effectively in computerized global information technology based organizations and institutions.

However, indications emerging from research findings and observation by the researchers seem to indicate that the needed ICT applications for the preparation of the students for the world of work are not producing required impacts. It appears that many institutions running office technology and management programme are not well equipped with relevant and up-to-date facilities for competent technological development of OTM students. This inability of educational institutions to cope with



the current technological changes taking place in the world of office technology does not make for meaningful training of OTM graduates for national and international jobs. This seems to widen the gap between what is taught in schools and what the graduates need for effective work performance in modern office. Therefore, the researcher is interested in knowing the extent to which graduating students of office technology and management programme polytechnics in Imo State are exposed to the needed office applications for effective work performance in global work environment.

Research Questions

The study was guided by the following research questions:

1. How adequate are graduating students of OTM exposed to ICT office application in polytechnics in Imo State?
2. How adequate are graduating students of OTM exposed to management information system in polytechnics in Imo State?
3. How adequate are graduating students of OTM exposed to webpage design in polytechnics in Imo State?

Hypothesis

1. Office technology and management students and educators do not differ significant in their mean ratings on the adequacy of exposure to modern office technology by graduating office technology and management students in polytechnics Imo State.

Method

The research design used for this study was descriptive survey design to assess the adequacy of exposure to modern office technology by graduating office technology and management students in polytechnics Imo State. The population of the study consists of all the 32 office technology and management educators and 364 HND final year OTM students in polytechnics in Imo State Nigeria. The distribution of OTM educators and students according to their institutions are as follows: Federal Polytechnic, Nekede (25 OTM educators and 163 students); Imo State Polytechnic, Umuagwo (7 OTM educators and 79 students). This information was generated from the various institutions. The entire population was used for the study since the number is small and relatively manageable, hence there was no sampling.



A 30 item questionnaire was used as instrument for the study. The research instrument has two parts Part A and Part B. Part A contains information on the respondent's biographic data. Part B is divided into three sections in line with research questions raised for the study. The instrument was structured to elicit information from the assessment of respondents on a 4 point rating scale as follows:

Very Adequate	(VA)	4
Adequate	(A)	3
Barely Adequate	(BA)	2
Not Adequate	(NA)	1

To establish the validity of the instrument, it was given to three experts, one in Department of Technology & Vocational Education, Nnamdi Azikiwe University, Awka, while the other two were from Federal Polytechnic Oko, all in Anambra State Nigeria. Their observations were effected on the questionnaire before final copy was written. To establish the reliability of the instrument used for the study, the questionnaire was administered to ten OTM lecturers and twenty students in a polytechnic outside their area of study. The result was computed using Chronbach Alpha Correlation Formula which yielded a reliability coefficient of 0.83 which was high enough to consider the instrument reliable.

The questionnaire constructed was administered by the researcher to the respondents with the aid of research helpers. The researcher was able to collect some of the questionnaire on the spot while others were collected after few days. Out of a total of 364 questionnaire distributed 285 copies were returned base on which analysis for this study was done. In analyzing the data to be collected from the instrument administered, simple mean was used to analyze the responses for research question while t-test was used to test the hypothesis formulated for the study. The Decision Rule is this: Any item with a mean rating that is equal to or greater than 2.5 was considered 'Adequate' while any item with a mean rating that is less than 2.5 was considered 'Inadequate'. The null hypothesis was tested using t-test statistics at 0.05 level of significance.

Result

The results of the study were presented in tables according to research questions while the test of hypothesis was presented in Table 4



Research Question 1

How adequate are graduating students of OTM exposed to ICT office application in polytechnics in Imo State?

Table 1: Respondents' Mean Rating on the Adequacy of Exposure to ICT Office Application (N=285).

S/N	ICT facilities	Mean	Remarks
1	Accessing ICT office application software e.g. MS Word, Excel and so on.	2.60	Adequate
2	Creating and organizing computer files and folders as well as creating back-ups of important files	3.53	Adequate
3	Using input devices to enter and edit text accurately such as copying, cutting and pasting text in a document	3.34	Adequate
4	Inserting pictures and symbols, setting up tabs and controlling margins and layout	2.71	Adequate
5	Creating and formatting a table, changing text direction in a table, merging and splitting cells in a table	2.61	Adequate
6	Using Word Art to create and shape text in a document as well as saving, previewing and printing text	3.60	Adequate
7	Entering, sorting, merging and centering data in worksheet as well as adjusting column's width and row's height	3.55	Adequate
8	Creating and applying formula to carryout arithmetic computation in a worksheet	3.00	Adequate
9	Creating, editing formatting charts using spreadsheet application	3.20	Adequate
10	Paginating, saving previewing and printing a worksheet	3.00	Adequate
Grand Mean		3.05	Adequate

The data in Table 1 revealed the adequacy of exposure to ICT office application by graduating students of office technology and management students in polytechnics in Imo State. The respondents were of the opinion that students' exposure to modern office technology is adequate for effective job performance. The grand mean of 3.05 shows that the respondents agreed that graduating students of office technology and management adequately exposed to modern office technology for effective job performance upon graduation from polytechnic.

Research Question 2

How adequate are graduating students of OTM exposed to management information system in polytechnics in Imo State?



Table 2: Respondents' Mean Rating on Adequacy of Exposure to Management Information System (N=285).

S/N	ICT facilities	Mean	Remarks
11	Creating new database using blank database or database wizard	3.22	Adequate
12	Creating tables in a DBMS and Using a primary key in a table	2.60	Adequate
13	Setting field properties, modifying table structure as well as creating new tables using table wizard or design view	3.00	Adequate
14	Performing data entering in datasheet view and applying data types	2.82	Adequate
15	Changing database format and locating a specific record in a database	3.20	Adequate
16	Adding and deleting a record, finding and replacing data in a database	3.61	Adequate
17	Adding relevant and deleting unwanted fields in a database	2.54	Adequate
18	Sorting records in alphabetical or descending order, querying a table and applying filter	3.20	Adequate
19	Working in database view and organizing database	2.89	Adequate
20	Applying techniques for saving a new database	3.12	Adequate
Grand Mean		2.92	Adequate

Table 2 reveals the adequacy of exposure to management information system by graduating students of office technology and management students in polytechnics in Imo State. The respondents were of the opinion that graduating OTM student were adequately exposed to management information system for effective job performance. All the items in this section received mean rating greater than 2.50. The grand mean of 3.84 is a further indication of respondent agreement to the items that graduating OTM student were adequately exposed to management information system for effective job performance upon graduation from school.

Research Question 3

How adequate are graduating students of OTM exposed to webpage design in polytechnics in Imo State?



Table 3: Respondents' Mean Ratings on the Adequacy of Exposure to Webpage Design (N=285).

S/N	Items	Mean	Remarks
21	Accessing software application like MS Front or Expression Web 4 and Typing a Hyper Text Mark-up Language (HTML) code	2.60	Adequate
22	Applying background color to a HTML element, border color	3.53	Adequate
23	Embedding an image into a webpage and aligning images to other content of a webpage	3.64	Adequate
24	Formatting a table in HTML and setting table layout in a webpage	2.63	Adequate
25	Adding script to a webpage and creating a hyperlink	3.05	Adequate
26	Saving refreshing and printing a web page using Ms Front Page or Expression Web 4	2.60	Adequate
27	Sending and receiving emails with attachment and using shared devices within a network	2.55	Adequate
28	Refreshing a web page for ensure that information are displayed are expected.	3.00	Adequate
29	Downloading information from and uploading information into the internet	3.20	Adequate
30	Publishing a webpage in a local and public search engines	3.00	Adequate
Grand Mean		2.98	Adequate

Table 3 reveals the adequacy of exposure to webpage design by graduating OTM students in polytechnics in Imo State. The respondents were of the opinion that graduating OTM students were adequately exposed to webpage design for effective job performance. All the items in this section received mean rating greater than 2.50. The cluster mean of 2.98 indicates that the respondents agreed that graduating OTM student were adequately exposed to webpage design skills needed for effective job performance.

Testing of Hypothesis

Table 4: The t-test Analysis of OTM Educators and Students on Adequacy of Exposure to Modern Office Technology

Gender	N	X	S	z-cal	α	Df	z-crit	Remark
Educators	32	3.60	0.28	1.41	0.05	283	1.96	Retained
Students	253	3.82	0.34					



Table 4, shows the t-test analysis of responses of OTM lecturers and students on the adequacy of exposure to modern technology by graduating OTM students in polytechnics in Imo State with mean scores of 3.60 and 3.82 respectively. The z-calculated value of 1.41 is less than the z-tabulated value of 1.96 at 383 degree of freedom and 0.05 level of significance. Therefore, the null hypothesis is retained which implies that, there is no statistically significant difference between the mean rating of OTM educators and students on the adequacy of exposure to modern office technology by graduating students in polytechnics in Imo State.

Discussion of Results

The discussion is based on the three research questions raised above. The result of the analysis of Research Question 1 revealed that the respondent agreed that graduating students of office technology and management were adequately exposed to ICT office application for effective job performance. This finding corroborated the report of Ezenwafor (2012) who found out that business education lecturers in tertiary institutions were competent in word processing and adequately utilize it in training students. Evidently, these lecturers effectively inculcated the competencies in their students since teachers can only give what they have.

The data in Table 3 indicated how adequate graduating students of office technology and management are exposed to management information system for effective job performance in modern office. The result indicated that graduating students of office technology and management were adequately exposed to management information system which is highly needed for effective job performance of OTM graduates. This finding is in accord with Okolie (2012) who held that office manager in public owned organizations and corporation in Ebonyi State were conversant with database management competencies itemized

Furthermore, secretaries are expected to make great use of internet and webpage design application in carrying out online office functions in modern business offices. The result of the analysis of Research Question revealed that graduating students of office technology and management were adequately exposed to internet or webpage design applications. This finding agreed with Egbri (2012) who held that business educators in the south east are conversant with internet facilities and are adequately exposed in utilizing internet resources. This is because the extent of students'



exposure largely depends on lecturers' ability to explain, demonstrate and guide students in practical sessions.

Conclusion

Based on the findings of the study, it has been concluded that graduating OTM students in polytechnics in Imo State were adequately exposed to modern office technology in terms of ICT office application, management information system and webpage design. This implies that graduating students of office technology and management programme will be able to create easily, share and maintain data and files electronically for timely management decision making in any organization where their services may be required.

Recommendations

Based on the findings of this study, discussions and conclusions drawn from it, the following recommendations are made for policy making:

1. Employers of labour should not hesitate to engage the service of graduates of office technology and management programme with full assurance that this crop of graduates are well packaged to deliver maximally to organizational goals and objectives.
2. The Government should ensure that office technology and management programme polytechnic education in general is adequately funded for strong infrastructural support base because the industrial growth of the nation relies heavily on the products of polytechnic education.
3. Academic boards of various polytechnics in Nigeria should pay more attention to the needs of OTM departments so as to provide the much needed ICT infrastructure and human capacity building required to deliver the mandate of OTM programme
4. OTM educators should, as a matter of responsibility and necessity lay more emphasizes in the use of office application in the training of office technology and management students for effective job performance.

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