A COMPETENCIES POSSESSED BY OFFICE TECHNOLOGY AND MANAGEMENT LECTURERS IN POLYTECHNICS IN ANAMBRA AND ENUGU STATES

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Abstract

This study sought to assess the tele-communication and media competencies possessed by OTM lecturers in tertiary institutions in Anambra and Enugu states. The study adopted a descriptive survey design. Two research questions guided the study while two hypotheses were tested at 0.05 level of significance. The population consisting of 38 OTM lecturers was studied. A validated questionnaire with reliability coefficients of 0.71 and 0.84 was used for data collection. The arithmetic mean and standard deviation were used to analyze the data in respect of the research questions while ANOVA was used to test the hypotheses. It was found that respondents possessed both tele-communication and media competencies at a low extent. The researchers' conclude that the respondents can hardly produce graduates with tele-communication and media competencies. It is recommended, among others, that management of Polytechnics should provide adequate technological resources, technical and administrative support to encourage OTM lecturers to successfully use ICT in classrooms.

Keywords: Assessment, tele-communication competencies, media competencies, OTM, tertiary institutions.

Introduction

Office Technology and Management is a programme of study designed to equip students with secretarial/office skills for employment in various fields of endeavour. Graduates of the programme are groomed to fit properly into the office of any computerized organization, to perform professionally such functions of a secretary which, among others, include relating the functions of the office to the whole organization, attending meetings and providing information as may be required; making accurate records of meeting proceedings, filing and retrieving information, taking appropriate action independently when faced with challenging secretarial office problems and showing personal qualities and attributes that are conducive and co-exist with the work group (NBTE, 2004). Adeyemi (2006) stated that OTM/secretarial education started in Nigeria in the 1920's with the pioneering firms like John Holt Company Limited and United African Company (UAC) training people to become clerks and typists for the benefit of their companies. They later became trainers of secretaries.

The trainers manned the local studios called commercial institutes which offered secretarial courses such as Typewriting, Shorthand, English Language, Arithmetic, Business Methods, and Bookkeeping on part time to secretarial aspirants for the first entry into the jobs. These studios were found in cities like Benin-city, Calabar, Enugu, Lagos, Port Harcourt etc. Graduates from these studios were employed without passing any professional examinations, rather because they could produce letters and handle office routines as a result of their mastery of keyboards and office procedures. These forced the early missionaries to introduce commercial subjects into their school curricular. The stages of development of OTM is taken from the manual typewriting stage, electric typewriting stage, electronic typewriting stage to word processing stage which ushered in information and communication technology era.

The innovations that have taken place world-wide on the area of information communication technology have broken all national and international barriers and turned the world into a global village, since it has made information available to organizations and individuals everywhere and at anytime. The rapid advancement in technology and new innovations have created various business needs and wants, and has opened new opportunities like e-business. These new opportunities pose enormous challenges to OTM lecturers and society at large. Various ICT competencies must be developed at ND and HND levels to suit the labour market and raise the technocrats with other students in order to achieve ICT educational objectives. North Carolina Department of Public Instruction (2002) enumerated nine basic ICT competences as follows: computer operation skills, setup, maintenance and trouble shooting, introductory word processing, desktop publishing, spreadsheet/graphing, data base, networking, telecommunication, media communications (including image and audio processing) and multi-media integration. In the same vein, UNESCO (2007) listed teachers' ICT knowledge and competencies as word processing, internet, file navigation, E-mail, presentation packages, spreadsheets, database and SIS curriculum manager.

There is an urgent need to ensure that students and different categories of workers acquire the right skills for the 21st century. There are two main reasons why schools and teachers work towards increasing the use of ICT in education. First is the potential of ICT to change the nature of work and leisure over the next twenty years. Secondly, there is a growing body of academic research, such as the Interactive Education Project which demonstrates how ICT enhances the quality of teaching and learning in schools, and thus contributes to the raising of standards of achievement in education. The ICT can fill this gap because it can provide access to different sources of information. It will provide correct information as comprehensive as possible in different formats with different examples. ICT provides online interaction facility. Students and teachers can exchange their ideas and views, and get clarification on any topic from different experts, practitioners. It helps learners to broaden the information base. ICT provides variety in the presentation of content which help learners in concentration, better understanding, and long retention of information

which is not possible otherwise. The learners can get opportunity to work on any live project with learners and experts from other countries. ICT can provide solutions to all these problems and weaknesses, but it is important that the teacher has a clear idea of how and where ICT have an impact. One additional benefit is that use of ICT often creates situations where students must work together.

Tinio (2003) noted that there are three general approaches in the instructional use of internet. Among them are, learning about computers and the internet in which technological literacy is the end goal, learning with computers and the internet, in which the technology facilitates learning across the curriculum, learning through computers and the internet, which includes integrating technological skills development with curriculum applications.

Media are those ICT facilities that combine basic types of media into learning environment e.g. video, sound, graphic and animation, thus providing a powerful teaching and learning environment. Multimedia in teaching provides students with the technical steps needed to produce multimedia document, encourage deep reflective thinking and empower student to create and design rather than absorbing representations created. Multimedia projector can be used by the teacher for seminar presentations, classroom instructional delivery.

The study is motivated by the fact that there has been excitement over the introduction of ICT for the training of OTM students, but the situation on ground visa-vis the qualities of OTM graduates does not seem to support the enthusiasm. Observation in many tertiary institutions where OTM is taught, the complementary ICT gadgets seem to be in short supply and these manifest on the quality of student graduates in OTM in our tertiary institutions. That is why Amoor (2009) reported that many Nigerian tertiary institutions that offer business education programme produce half baked secretarial graduates in an era of Information and Communication Technology. This study is, therefore, significant as it will provide requisite information on the tele-communication and media competencies possessed by OTM lecturers in tertiary institutions and it will help the tertiary institutions in packaging professional development programs for lecturers to update their ICT knowledge and skills.

Problem of the Study

Since the level at which a teacher can perform depends on his level of competence, OTM lecturers are required to possess ICT competencies covering tele-communication and media, among others. The problem of this study is that no study has been conducted to assess the ICT competence of OTM lecturers in the area which will reveal any deficiencies and direct remedial actions. This leaves a gap in knowledge which this study seeks to fill as a major step towards ensuring that OTM lecturers in the area of the study are ICT competent enough to impart the knowledge and skills to prospective office technology managers.

Research Questions

The following research questions were used for the study.

1.   To what extent do OTM lecturers in tertiary institutions in Anambra and Enugu States possess tele-communication competencies for teaching OTM courses?
2.   To what extent do OTM lecturers in tertiary institutions in Anambra and Enugu States possess media competencies for teaching OTM courses?

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

1.   The respondents do not differ significantly in their mean ratings on the extent they possess tele-communication competencies as a result of their academic qualifications (B.Sc/B.ED, MSC/M.Ed, and Ph.D).
2   There is no significant difference in the mean ratings of the respondents on the extent they possess media competencies as a result of the ownership of the institutions. (Federal, State and Private).

Method

The design of the study is a descriptive survey as recommended by Nworgu (2006) for studies that seek opinion of a population or its representative sample on an existing phenomenon using questionnaire or interview. The study was conducted in Anambra and Enugu States of Nigeria which are in the south east geo political zone of Nigeria. Population of the study consisted of 38 OTM lecturers in the area which include male and female of different educational attainments and lecturing experiences. The entire population was studied without sampling because the size is not too large. A validated 5-point rating scale questionnaire with 23 items was used for the study. The reliability of the instrument was determined with the split half method. The instrument was administered to 14 OTM lecturers from one institutions in the nearby Ebonyi state and the data collected were analyzed with the Spearman Rank Order Correlation Coefficient formula to determine the relationship between the two scores and the reliability coefficients of 0.71 and 0.84 were obtained for the two sections of the instrument which indicated that the instrument was reliable. Copies of the questionnaire were administered directly by the researchers and two coached assistants to the OTM lecturers in their institutions with the help of their Heads of Department. Contacts were established with the Heads of Department to know when to re-visit the institutions to retrieve the completed instrument. This procedure ensured careful completion of the instrument by the respondents as well as a high response rate as 38 copies (representing 100 percent) were retrieved and used for the study. The arithmetic mean and standard deviation were used to analyze data to answer the research questions and establish the homogeneity or otherwise of the respondents' means while ANOVA was used to test the hypotheses at 0.05 level of significance. A mean rating that is equal to or greater than 3.5 was regarded as possessed at a high extent while any item with a mean rating that is less than 3.5 was regarded as possessed at a low extent. A hypothesis will be upheld if the calculated F value is less than the significant level of 0.05 and rejected if the calculated F value is equal or greater than the significant level of 0.05.

Results

Research Question 1

To what extent do OTM lecturers in tertiary institutions in Anambra and Enugu States possess tele-communication competencies for teaching OTM courses?

Table 1: Mean and standard deviation of respondents on the extent OTM lecturers possessed telecommunication competencies.   N = 38

S/N	Telecommunication competencies	Mean	SD	Remarks
1	Use telex facilities in sending or receiving correspondences	3.2	1.29	Low extent
2	Teach the method of communication using e-learning.	2.8	1.37	"
3	Demonstrate skills in Very Small Aperture Terminals (VSATs).	2.5	1.29	"
4	Teach the use of machines for sending messages.	3.2	1.37	"
5	Install and configure telecommunication software.	2.4	1.21	"
6	Practice correct communication ethics and etiquette according to guidelines and laws	3.2	1.26	"
7	Work collaboratively and cooperatively in a technology setting.	3.1	1.22	"
8	Demonstrate knowledge and skills in the effective operation of mobile cellular phones.	3.6	1.28	High extent
9	Use electronic organizer technology for information storage.	3.1	1.33	Low extent
10.	Use wireless technology	3.2	1.41	"
11.	Operate internet telephony	2.9	1.36	"
	Mean of mean	2.9	1.30	"

Data in Table 1 show that Item 8 on tele-communication competence has a mean score of 3.6 which means that the respondents possessed the telecommunication competency shown as on item 8 to a high extent. The rest with mean scores between 2.4 and 3.2 indicate that the respondents possess them to a low extent. The mean of mean score of 2.90 indicate that generally the respondents possessed tele-communication competencies at a low extent. The standard deviation scores indicate that the respondents were homogenous in their assessment.

Research Question 2

To what extent do OTM lecturers in tertiary institutions in Anambra and Enugu States possess media competencies for teaching of OTM courses?

Table 2: Mean and standard deviation of respondents on the extent OTM Lecturers possessed media competencies.   N = 38

S/N	Media competencies	Mean	SD	Remarks
12	Effectively use distance learning desktop video conference and tele-conferencing teaching technology.	2.5	1.41	Low extent
13	Produce print based products such as newsletters, brochures, posters etc.	2.7	1.41	"
14	Produce electronic slides and overheads for electronic teaching.	2.6	1.34	"
15	Use painting and drawing tools to produce images	2.4	1.27	"
16	Produce print based fliers	2.6	1.38	"
17	Edit and produce a video text	2.4	1.41	"
18	Demonstrate mastery of characteristics of different media, strengths and weaknesses of different media.	2.9	1.38	"
19	Demonstrate mastery of media communication resources.	3.0	1.23	"
20	Use a Video Tape Recorder.	3.5	1.30	High extent
21.	Use closed circuit, TV via cable satellite.	2.7	1.28	Low extent
22	Use Radio and TV Broadcast.	2.8	1.45	"
23	Effectively manipulate a fax machine	2.9	1.48	"
	Mean of mean	2.8	1.36	"

Data in Table 2 show that item 20 on media competence achieved a mean score of 3.5 which means that the respondents possessed the media competency on item 20 to a high extent. The rest with mean scores between 2.4 and 3.0 indicate that the respondents are competent on the items to a low extent. The mean of mean score of 2.80 indicate that generally the respondents possessed media competencies at a low extent. The standard deviation scores indicate that the respondents were homogenous in their assessment.

Hypothesis 1

The respondents do not differ significantly in their mean ratings on the extent they possess tele-communication competencies based on their academic qualification (B.Sc/B.ED, MSC/M.Ed, and Ph.D).

Table 3: Summary of One Way Analysis of Variance (ANOVA) of respondents rating on the telecommunication competencies possessed as a result of academic qualifications.

Sources of variation	Sum of squares	DF	Mean squares X^2	F-Cal	F-tab	Level of significance	Remarks
Between Group	0.25	2	0.13	0.93	3.32	0.05	NS
Within Group	4.09	30	0.14				
Total	4.34						

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The result in Table 3 shows that the calculated F-value of 0.93 is less than the table F-value of 3.32 with 2 and 30 degrees of freedom at 0.05 level of significance. This means that the academic qualification possessed by the respondents do not significantly affect the mean rating of their telecommunication competencies. The hypothesis was, therefore, upheld.

Hypothesis 2

There is no significant difference in the mean ratings of the respondents on the extent they possess media competencies as a result of the ownership of the institutions (Federal, State, Private).

Table 4: Summary of One Way Analysis of Variance (ANOVA) of respondents rating on their possessed media competencies based on the ownership of the institutions (Federal, State, Private).

Sources of variation	Sum of squares	DF	Mean squares X^2	F-Cal	F-tab	Level of significance	Remarks
Between Group	0.48	2	0.24	2.67	3.28	0.05	NS
Within Group	2.88	33	0.90				
Total	4.34						

The result in Table 4 shows that the calculated F-value of 2.67 is less than the Table F-value of 3.28 with 2 and 33 degrees of freedom at 0.05 level of significance. This means that no significant difference existed in the respondents' mean ratings on their possessed media competencies as a result of ownership of the institutions. The hypothesis was, therefore, upheld.

Discussion

The result of the analysis on telecommunication competencies as shown in Table 1 indicates that some of the OTM lecturers in Polytechnics in Anambra and Enugu States possessed tele-communication competencies at a low level. The findings agree with the report of Owa (2005) that all the lecturers and students of colleges of education in Delta state possessed tele-communication competencies at a low level. The test of hypothesis 1 on Table 3 indicates that there was no significant difference in the academic qualification of the respondents in their possessed tele-communication competencies.

The result of the analysis of media competencies as shown in Table 2 indicates that the respondents possessed media competencies at a low level. Among the 12 competencies rated by the respondents, only one competency was possessed at a high extent while the remaining 11 competencies were possessed at a low level. This finding agrees with the report of Igberaharha (2009) that the business educators do not have most requisite competencies in ICT packages.

The test of hypothesis 2 on Table 4 indicates that there was no significant difference in the ownership of the institutions by the respondents in their possessed media competencies.

Conclusion

Based on the findings of the study and their discussions, it is concluded that OTM lecturers in Polytechnics in Anambra and Enugu states possessed tele-communication and media competencies to a low extent.

Recommendations Based on the findings and conclusion of the study, the following recommendations are made:
1. Management of polytechnics should provide adequate technological resources, technical and administrative support to encourage office technology and management lecturers to successfully use ICT in classrooms.
2. OTM lecturers in the area of study should take advantage of opportunities to increase their telecommunication and media competencies.

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