IMPLEMENTATION OF OFFICE TECHNOLOGY AND MANAGEMENT CURRICULUM TOWARDS ACQUISITION OF KEYBOARDING SKILLS

BY

[1]Joshua Sule MAMMAN PhD and [2]Florence Oluchi NNAJI

[1]joshua.mamman@kwasu.edu.ng

[1]https://orcid.org/0000-0003-3872-2247

[2]olunna20@yahoo.com

[1]Department of Business and Entrepreneurship Education

[1]Kwara State University, Malete

[2]Department of Office Technology and Management

[2]School of Business and Management Technology

[2]Federal Polytechnic Bali, Taraba State

Abstract

The research investigated the implementation of Office Technology and Management curriculum toward acquisition of keyboarding skills in Polytechnics in North-east Nigeria. The study determined two specific purposes and two hypotheses were tested and it was anchored on the 21st century skills theory. The explanatory mixed method research design was employed for the study. The population was 115 comprising 107 lecturers and 8 Heads of Office Technology and Management Departments from eight polytechnics in the North-east. It was a census study since the whole population was used. A 36-item questionnaire tagged ''Implementation of Office Technology and Management Curriculum towards Acquisition of Keyboarding Skills'' (IOTMCAKS) with modified 4-points rating scale was the instrument used for the quantitative data collection. A semi-structured interview was used to collect the qualitative data. The instruments were face and content validated by three experts. The internal consistence of the instrument was determined using Cronbach Alpha procedure and the result yielded a reliability coefficient index of 0.82. Mean and standard deviation were used to answer the research questions, independent t-test was used to test the hypotheses at 0.05 level of significance. The study revealed among others that facilities are available to a high extent with a weighted average mean and standard deviation scores of 3.02 and 0.81, lecturer's workload is not excessive with a grand calculated weighted average mean and standard deviation scores of 2.90 and 0.84. The findings on all the two hypotheses tested revealed that there were significant differences in the mean ratings of federal and state institutions regarding facilities, lecturer's workload, for the acquisition of keyboarding skills (t_{105} = 13.093, $P<0.05$, 12.769, $P<0.05$, 6.180, $P<0.05$, t_{105} = 12.606, $P<0.05$. Sequel to the findings of the study it was recommended among others that to ensure students effectiveness managements and heads of departments should not allocate excessive courses to lecturers teaching keyboarding so that they will give proper attention to the implementation of the skilled course.

Keywords: *Implementation, Office Technology and Management, Curriculum, Keyboarding, Skills.*

Introduction

Every system has a guide to be followed in order to achieve the purpose for which the system was established. Educational system is not exempted from this. Education as a process of training learners to better their living and be globally relevant has its guide which is the curriculum. Educational system has many programmes and each programme has its curriculum planned with the

relevant courses to achieve the objectives of the programme. Business men plan their businesses to be successful. In other words, the planning serves as curriculum because it is a guideline to be followed for the achievement of the set goals. Planning alone cannot achieve any purpose unless it is properly implemented. Implementation is the execution stage of a plan, how well a curriculum is implemented determines the success of a programme. Keyboarding is a vital course in OTM programme which requires proper implementation of the curriculum so that graduates will be equipped with work-based skills to fit into the modern office.

The major aim of education is to bring desirable goals at all levels. Traditional education taught youths skills such as tent-making, fishing, farming, beads making, blacksmithing and so on. The introduction of western education was centred also on skill acquisition. Skills acquisition is very important to the youths because when the youths are equipped with requisite skills, it will enable them to become self-reliant. It is agreed that the quality of education an individual receives, determines the extent of the usefulness of the individual to himself and to the society at large. Skills are acquired through teaching and learning and the knowledge acquired depends on the quality of education prevalent in the country. Education that is relevant to the youth as well as the society is education that equip learners with skills that will enable the learners to be self-employed. The kind of education that lays emphasis on recitation and remembering or head knowledge is no longer suitable for the 21st century. Education, according to Offorma (2016), is the teacher's act of informing and strengthening the powers of the body and mind; it is a process of transmitting cultural knowledge to recipients to guarantee social control and ensure rational direction of society. In this case OTM education is meant to acquaint the learner with keyboarding and wording processing skills that could lead to independence. Duktur (2016) describes education as a light that shows mankind the right direction to surge. It is based on this premise that Enyekit, Ubulom and Enyekit (2016) reported that educational courses are always designed to equip students with needed skills, knowledge, attitudes and capabilities to be useful in life and in society. The training and development of human potentials in any nation, is a very vital aspect of education as it inculcates appropriate skills, values, knowledge, attitudes and work competencies in individuals for meaningful life and national development. Education invariably is a sure key to a nation's development and sustainability. Education has received great emphasis all over the world as a result of the enormous role it plays in the socio-economic, political and technological development of society. OTM education has the mandate to train learners for the workforce and the self-reliance need. The Federal Government of Nigeria (2011), in the National Policy on Education expressly states the relevance of education as an instrument for excellence.

Implementation of curriculum is very important in education. It is the most pertinent duty that is performed in schools. Education industry helps in effective implementation of the curriculum, for learners skill acquisition and for employability of 'grandaunts'. When the curriculum is properly implemented the unemployment quagmire will be reduced. Graduates of OTM are expected to be self-employed so as to be employers of labour and contribute to national development. Educational institutions, curriculum planners and the government are interested in reducing the rate of unemployment, this is the reason why curriculum implementers should teach keyboarding skills with firmness. Acquisition of keyboarding skills allow recipients to boldly become entrepreneur through self-employment.

The 21st Century skills learning theory lays emphasis and insists that learning should be integrated, holistic, connected, skillful, relevant, adaptable, student centered, project based authentic and convenient. The learning theory states that providing students with education that is relevant to the society in which they live is preponderant. There is the need for students to be skillful and adaptable; they need to be able to work independently with ICT and communicate effectively. 21st Century skills learning theory emphasis on the need to consider a professional and societal environment in which access to knowledge is immediate. The 21st century learning equips individuals with necessary skills to become active members of the society. According to Gardner (1983), with a focus on the whole recipient, a student will typically identify personal strengths, weaknesses and be able to develop confidence and efficacy that can be expanded across to other

domains of learning. Edelson (2001) reported that a process of inquiry can help to induce students to take control of their own work and make decisions about the specific nature and direction of their work. The 21st century learning theory advocates the importance of deep meaning rather than surface meaning. Hence deep learning enables the learners to construct knowledge by adding new information to existing knowledge (Singha, Ong, Mohtar, Singh & Mostafae 2020).

This theory is very important to the study because the society has undergone series of changes including the educational system. Learning that is needed by the 21st century students is learning that will enable the students to be skillful and contribute meaningfully to the society. The traditional system of learning puts emphasis on passive learning where the teacher tells learners what he knows is no longer helpful. The emphasis on teacher's content knowledge is no longer relevant the most important learning is what learners can do. Collaborative learning becomes important because the world has changed, organization and workplace have equally changed. Keyboarding skill will enable the learner to be self-employed because keyboarding skill is utilized every day in the 21st century technological world. It is therefore, expedient that

OTM curriculum implementers assist students learning by given learners enabling environment that will give them the opportunity for assertive and activity-based learning.

Office Technology and Management is branch of business education programme which equips learners with requisite skills. According to Ademiluyi and Okwuanaso (2013), the name "Office Technology and Management" is a recent innovation which signalizes secretarial profession's development not only from an analogue age to a digital era, but also from its time-honored assistant position to a managerial one. OTM programme according to Ademiluyi and Ademiluyi (2018), is a programme that develops in the recipients, the knowledge and competencies needed to function as competent secretaries and office managers in the contemporary world of works. Ukaike (2018), states that OTM programme provides students with in-depth administrative office preparation to meet the demands and challenges in the business environment. OTM programme takes into consideration the following six elements, general studies, office procedure, office technology, business and administrative management, numeric part and Students Industrial Work Experience Scheme (Nnaji & Pyiki, 2019).

Keyboarding course is continuous course that is always relevant because production of computers with different keyboards are in nanosecond. Technology has been accepted all over the world and office managers are the users of different keyboards as their job is required in every organization mainly for keyboarding. Keyboarding is the art of communicating fluently with the keyboard through manipulation of the keys to produce mail able documents from typewritten or handwritten manuscripts (Olupayimo & Ademiluyi, 2021). According to Oborah (2011) and Esene (2012), mastery of keyboarding skill has become necessary and equally important in the world of work as the use of computer has dominated today's business environment. Willer (2013) describes keyboarding as the work of inputting information into the computer using keyboard. Virginia Department of Education (2012) defines keyboarding as the input of data using touch method on a standard alphanumeric keyboard such as the QWERTY keyboard. According to Ibrahim (2015), traditionally, keyboarding has been the primary course taught by business education at the secondary level.

The entrance of computer made many people to see keyboarding as a basic skill needed by all students. The author refers keyboarding ''as an enabling skill tool needed by almost every worker in all types of organizations and at every level in the hierarchy of these organizations.'' keyboarding as "an art of producing prints like character on paper by pressing keys on the machine called computer, to meet the need to communicate in most appropriate manner by writing" (Garba, 2011). Odums and Inemikabo in Ozuruoke (2016) explain keyboarding to mean ''… a psychomotor skill that comprises knowledge of the CORRECT SEQUENCE for the manipulation of alphabet, figure, symbols and other keys of a given word processing machine by touch with the aim of processing data. In fact, the present era digital revolution is almost making it mandatory for both business and non-business students (and lecturers) as well as other professionals who must operate

the touch-button-information equipment to generally enrol in a keyboarding training programme. A recommended source of keyboarding skill includes all the knowledge and skill required for efficient operation of the ICT machines (Ozuruoke, 2015).

Availability of instructional facilities and every other teaching and learning material is of predominant importance in the implementation of OTM curriculum (Amahi & Odigili, 2021). The proficiency of OTM products in the world of work and business is dependent on the provision of instructional facilities. When the right facilities are utilized in implementation process the graduates will acquire the required skills without being re-trained by the employers. Without the instructional facilities for implementation of the curriculum OTM curriculum implementation becomes theoretical and ineffective. Amahi and Odigili maintained that knowledge and skills acquired through using needed facilities are expected to equip learners with basic practical knowledge required to function well in the society or progress successfully in their education. Ugbe (2018) asserts that instructional facilities available for implementation of OTM courses include media or automated typewriter, close circuit TV, word processor, computer, video tape recorder, sound on paper system, advanced calculators, digital access system, and so on. Owenvbiugie and Ojewale (2014) state that teaching aids like electronic typewriter, computer, television set, tapes, radio and projectors among others coupled with competent business teachers are capable of bringing success to teaching. Researchers have discovered that the development of facilities and ICT will contribute to improve professional status of teachers and students, enhance capacity and offer opportunities for career development and advancement that build on recognition and reward of practice (Elogbo & Akek, 2019).

Lecturers are presumptively being over utilized because of the annual increase in the number of admissions. It is assumed that the increase in students enrolments results in over bearing tasks and responsibilities for the academic staff. This is in terms of numbers of courses to be taught per semester, numbers of periods per week, administration and marking of continuous assessments. Inclusive also, are setting of examination questions, examination invigilation, marking of examination scripts, result processing, supervision of students in Industrial attachment, projects defense and supervision of National Diploma and Higher National Diploma research work (Osifila & Aladetan, 2020).

Statement of the Problem

Several efforts are being put in place to make Nigeria a model with developed economy in the aspect of business education, which OTM is a branch. Business education was brought to limelight and given prominence by the National Policy on Education in 1977. It is a programme of study which is geared towards equipping learners with employability skills and knowledge which would enable them to create or acquire jobs.

Like any other educational programme the implementation of the curriculum is very important to the effectiveness and achievement of goals of the programme. It is observed that many graduates of OTM can hardly operate and manipulate the keyboard. The finger dexterity is another issue; students continue to rub the keyboard before striking the keys. Taking their eyes away from the keys while typing is impossible for many of the contemporary students. It is disturbing because keyboarding skills like the finger dexterity on the machine is difficult to learn outside school. Lack of training on new curriculum and poor staff development methods is an issue in curriculum implementation. Shortage of teaching and learning resources sometimes constitutes a problem to curriculum implementation, the workload of teachers were observed to be part of the problems. The researcher observed also that most employers of labour are not satisfied with OTM graduates performance in the office. In support of this Essia (2012) and Nwazor (2012) decried the failure of the education offered in tertiary institutions, especially in business education programmes to prepare students and graduates for real life situations. This elicited enquiry on the possible reasons for this development, as against the usual practice of keyboarding mastery embedded in finger dexterity on the keyboard. If this study is ignored students will persist in the hunt and peck method and the

satisfaction embedded in finger dexterity of keyboarding will be lost. The keyboarding skill will be jeopardized.

Research Questions

This research provided answers to the following research questions.

1. To what extent are facilities available for the implementation of OTM curriculum towards acquisition of keyboarding skills?
2. What is the extent of lecturers workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills?

Research Hypotheses

The following null hypotheses were formulated in line with the specific purposes of the study and were tested at 0.05 level of significance.

Ho_1. There is no significant difference in the mean responses of respondents from Federal and State institutions on the extent to which facilities are available for the implementation of OTM curriculum towards the acquisition of keyboarding skills.

Ho_2. There is no significant difference in the mean responses of male and female lecturers on the extent of lecturers workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills.

Method

The study adopted a mixed method research design. The Explanatory Confirmation research design was employed for the study. The mixed research design is suitable for this study since data was collected through quantitative and qualitative methods which will complement each other. The population of the study for the quantitative data comprises 107 OTM lecturers in Polytechnics in North-East, Nigeria. The population include, four Federal and four State polytechnics that offer Office Technology and Management programme in North-East Nigeria. For the qualitative data, all the eight Heads of Departments in these polytechnics were involved bringing the total population of the study to 115 OTM curriculum implementers. Due to the manageable size of the population, the entire 115 OTM lecturers were involved in the study therefore, the study was a census study. The research instruments were structured questionnaire and semi-structured interview developed by the researcher after extensive review of literature. The 36-item questionnaire was titled ‘’Implementation of Office Technology and Management Curriculum on Acquisition of Keyboarding Skills (IOTMCAKS).’’ The Questionnaire was structured on a modified 4-point Likert scale of Very High Extent, High Extent, Low Extent and Very Low Extent with corresponding values of 4, 3, 2, and 1 respectively. The second instrument is the interview schedule which was used to collect the qualitative data. The instruments were face and content validated by three experts. Two from the Department of Business and Entrepreneurship Education Kwara State University, Malete and one from Department of Measurement and Evaluation Taraba State University, Jalingo. The researcher conducted a pilot study at the Federal Polytechnic Offa. The data generated from the pilot study were analysed using Cronbach Alpha reliability method to determine the internal consistency of the instrument. The Cronbach coefficient calculated for this study was 0.82.

The quantitative data was collected by the researcher with the help of one research assistant from each of the polytechnics under study. The interviews were conducted face-to-face and through (WhatsApp). Mean and Standard Deviation were employed to analyse the data collected to answer the research questions. The data collected from the interview was analysed using content analysis. The null hypotheses were tested using independent t-test at 0.05 level of significance at the relevant degree of freedom. Decision rule with respect to research questions was based on the principle of upper and lower limits of the mean.

Thus:

Response Options	Points	Real Limit of Numbers
Very High Extent	4	3.50 – 4.00
High Extent	3	2.50 – 3.49
Low Extent	2	1.50 – 2.49
Very Low Extent	1	1.00 – 1.49

Any item with standard deviation of less than 1.96 indicates that there is not much variability from the mean or from the responses of the respondents. On the other hand, any standard deviation above 1.96 indicates that there are wide variations in the responses of the respondents. For the hypotheses any null hypothesis whose p-value is equal or greater than the Alpha value (0.05≥) and at the derived degree of freedom was retained and concluded that there is no significant difference between the respondents otherwise it was rejected.

Results

Research Question 1: To what extent are facilities available for the implementation of OTM curriculum towards the acquisition of keyboarding skill?

Table 1: Mean and standard deviation of responses on the extent facilities are available for the implementation of OTM curriculum towards the acquisition of keyboarding skills

S/N	Item Statements	$\bar{X}$	SD	Remark
1.	There are computers for the acquisition of keyboarding skills	3.36	0.86	High Extent
2.	Printers for the acquisition of keyboarding skills	3.26	0.87	High Extent
3.	Scanners for the acquisition of keyboarding skills	2.21	1.00	Low Extent
4.	Projectors for the acquisition of keyboarding skills	3.23	0.84	High Extent
5.	Electronic Typewriters for the acquisition of keyboarding skills	2.49	0.95	Low Extent
6.	Standard computer laboratories for the acquisition of keyboarding skills	3.20	0.82	High Extent
7.	Stapling machines for the acquisition of keyboarding skills	3.25	0.74	High Extent
8.	Swivel typing chairs for the acquisition of keyboarding skills	3.15	0.71	High Extent
9.	Computer tables for the acquisition of keyboarding skills	3.30	0.55	High Extent
10.	Socket layouts in the computer laboratories for the acquisition of keyboarding skills	2.89	0.83	High Extent
11.	Word processors for the acquisition of keyboarding skills	3.01	0.91	High Extent

12.	Perforators for the acquisition of keyboarding skills	3.04	0.74	High Extent
13.	Inverters for the acquisition of keyboarding and word processing skills	2.58	0.82	High Extent
14.	White board for the acquisition of keyboarding skills	2.86	0.85	High Extent
15.	Flash drive for the acquisition of keyboarding skills	3.06	0.82	High Extent
16.	Typing laboratories for the acquisition of keyboarding skills	3.47	0.70	High Extent
Weighted average		**3.02**	**0.81**	**High Extent**

Source: Field Survey, 2023

Analysis of data in Table 1 shows mean and standard deviation of responses on the extent to which facilities are available for the implementation of OTM curriculum towards the acquisition of keyboarding skills. The table reveals that the respondents indicate that there are computers, printers, projectors, standard computer as well as stapling for the acquisition of keyboarding skills to high extent (mean = 3.36, 3.26, 3.23, 3.20 and 3.25 respectively).

In addition, the respondents indicate that swivel typing chairs, computer tables and socket layouts in the computer laboratories are available to high extent for the implementation of OTM curriculum towards the acquisition of keyboarding skills (mean = 3.15, 3.30 and 2.89). The respondents also indicate that word processors, perforators, inverters, white boards flash drive and typing laboratories are facilities available to high extent for the implementation of OTM curriculum towards the acquisition of keyboarding skills (mean = 3.01, 3.04, 2.58, 2.86, 3.06 and 3.47 respectively). Though, the respondents indicate that scanners and electronic typewriters facilities available to low extent for the implementation of OTM curriculum towards the acquisition of keyboarding skills (mean = 2.21 and 2.49 respectively). The table shows a grand calculated weighted average mean and standard deviation scores of 3.02 and 0.81 respectively.

Research Question 2: What is the extent of lecturer's workload for the implementation of OTM curriculum towards the acquisition of keyboarding and word processing skills?

Table 2: Mean and standard deviation of responses on the extent of lecturer's workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills

S/N	**Item Statements**	$\bar{X}$	**SD**	**Remark**
1.	Lecturer's workload matters in the acquisition of keyboarding skill	3.29	0.89	High Extent
2.	The workload should be moderate for lecturer's effective performance	3.07	0.92	High Extent
3.	Lecturers have excess workload in ICT and Desktop publishing	2.38	1.00	Low Extent
4.	Lecturers have less workload in keyboarding	3.18	0.80	High Extent
5.	Lecturers have excess workload in Database	2.55	0.99	High

	Management			Extent
6.	Lecturers have excess workload in Office Application	2.18	0.94	Low Extent
7.	Lecturer's workload in Webpage Design is normal	3.14	0.77	High Extent
8.	Lecturer's workload in Management Information System is less	3.01	0.76	High Extent
9.	Lecturers have excess workload in Office Practice	2.30	0.95	Low Extent
10.	Lecturer's workload in Modern Office Technology is less	3.08	0.85	High Extent
11.	Lecturer's workload in shorthand is high	2.98	0.87	High Extent
12.	Lecturers are overloaded in Advanced Transcription	2.83	0.91	High Extent
13.	Lecturer's workload in Professional Ethics and Social Responsibility is less	3.04	0.69	High Extent
14.	Lecturers have excess workload in Entrepreneurship	2.38	0.93	Low Extent
15.	Lecturer's workload in Career Development is normal	3.12	0.72	High Extent
16.	Lecturer's workload in Oral Communication Skill is less	3.03	0.64	High Extent
17.	Lecturer's workload in Record Management is normal	3.26	0.65	High Extent
18.	Lecturer's workload in Office Administration and Management is excess	2.72	0.83	High Extent
19.	Lecturer's workload in Business Communication is normal	3.33	0.85	High Extent
20.	Lecturers have less workload in Professional Career Development	3.12	0.74	High Extent
Weighted average		**2.90**	**0.84**	**High Extent**

Source: Field Survey, 2023.

Analysis of data in Table 2 shows mean and standard deviation of responses on the extent of lecturer's workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills. The table reveals that the respondents indicate that lecturer's workload matters to high extent in the acquisition of keyboarding skills, same way workload should be moderate for lecturer's effective performance to high extent and lecturers have less workload in keyboarding, excess workload in database management to high extent, but workload in Webpage Design is normal and workload in Management Information System is less to high extent, same way workload in Modern Office Technology is less to high extent for the acquisition of keyboarding skills (mean = 3.29, 3.07, 3.18, 2.55, 3.14, 3.01 and 3.08 respectively).

In addition, the respondents indicate high extent that lecturer's workload in shorthand is high and are overloaded in advanced transcription to high extent, but workload in professional ethics and

social responsibility is less to high extent with normal workload to high extent in Career Development, high extent in lecture's workload in oral communication is less and normal workload in record management to high extent but workload in office administration and management is excess to high extent and lecturer's workload in business communication is normal as well as less workload in professional career development to high extent (mean = 2.98, 2.83, 3.04, 3.12, 3.03, 3.26, 2.72, 3.33 and 3.12 respectively). Though, the respondents indicate that excess workload in ICT and desktop publishing, office application, office practice as well as entrepreneurship are to low extent (mean = 2.38, 2.18, 2.30 and 2.38 respectively).

Test of Hypotheses

The two null hypotheses of the study were tested using independent sample t-test at 0.05 level of significance. The summary of the test of hypotheses are presented in Tables 3 and 4 as follows:

Ho_1. There is no significant difference in the mean responses of respondents from Federal and State institutions on the extent to which facilities are available for the implementation of OTM curriculum towards the acquisition of keyboarding skills.

Table 3: Summary of t-test of the difference between Federal and State institutions on the extent to which facilities are available for the implementation of OTM curriculum towards the acquisition of keyboarding skills.

Group	N	Mean	SD	t-cal	Df	p-value	Decision
Federal	62	3.52	0.41	13.093	105	0.000	H_{01} Rejected
State	45	2.33	0.53				

Source: Field Survey, 2023 P<0.05

The data in Table 3 reveal that there are 62 OTM lecturers in Federal polytechnics and 45 OTM lecturers in State polytechnics. The responses of OTM lecturers in Federal polytechnic indicates that facilities are available to high extent ($\bar{X}$ = 3.52; SD = 0.41) while the responses of OTM lecturers/instructors in State polytechnics indicates that facilities are available to low extent ($\bar{X}$ = 2.33; SD = 0.53). Their responses are close to the mean as the standard deviations are very low. The table reveals that there was significant difference in the responses of respondents from Federal and State polytechnics on the extent to which facilities are available for the implementation of OTM curriculum towards the acquisition of keyboarding skills (t_{105} = 13.093, P<0.05). Therefore, the null hypothesis was rejected.

Ho_2. There is no significant difference in the mean responses of male and female lecturers on the extent of lecturers' workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills.

Table 4: Summary of t-test of the difference between male and female lecturers on the extent of lecturer's workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills

Group	N	Mean	SD	t-cal	Df	p-value	Decision
Male	60	3.44	0.45				
				12.769	105	0.000	H_{02} Rejected
Female	47	2.22	0.53				

Source: Field survey, 2023 P<0.05

The data in Table 4 reveal that there are 60 male lecturers and 47 lecturers. The responses of male OTM lecturers indicates that lecturers' workload is to high extent ($\bar{X}$ = 3.44; SD = 0.45) while the responses of female OTM lecturers indicates that lecturers' workload isto low extent ($\bar{X}$ = 2.22; SD = 0.53). Their responses are close to the mean as the standard deviations are very low. The table reveals that there was significant difference in the responses of male and female lecturers on the extent of lecturers' workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills (t_{105} = 12.769, P<0.05). Therefore, the null hypothesis was rejected. This implies that male and female OTM lecturers differ significantly in their responses regarding the extent of lecturers' workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills.

The qualitative data were analysed using content analysis and the identified themes are related to the purpose of the study since the interview was semi-structured.

Facilities

The qualitative data collected on the available facilities for the implementation of Office Technology and Management curriculum towards acquisition of keyboarding skills reveal that all the eight participants representing 100% said that facilities are available for the acquisition of keyboarding skills. In other words, this will facilitate the acquisition of skills in this course because lack of keyboarding skills among students is one of the major problems facing OTM programme. One out of the eight participants said that even though there are enough facilities for the acquisition of skills in this course, whenever there are issues that will bring obstruction to the study of the courses. The department goes to the accounting laboratory of the school and use their machines and equipment in the implementation process.

On the state of the facilities three of the eight participants explained that there is paucity of fund which makes it difficult to repair the facilities sometimes. The facilities require attention especially when they have been overused, but that they still source for fund to maintain them in order to break even. The HODs concluded that there is the need to improve on the facilities because there are latest versions of the computer systems available because technology keep increasing.

Lecturer's Workload

All the HODs representing 100% of the participants revealed that they have enough lecturers for the acquisition of keyboarding skills. The HODs said the number of lecturers is adequate for the implementation of the OTM for the acquisition of these course because the departments have only ND programme of 30 students, 30 for two streams according to NBTE regulation for ND1 and ND 2 therefore, the lecturers are not overloaded. A HOD also said that the number of lecturers is not very adequate, but they use lecturers from a sister polytechnic and college of education in the state to augment the departmental lecturers therefore, the workload is not excessive. Only one out of the

four state polytechnics is having Higher National Diploma programme while the four federal polytechnics are all running HND programmes.

Discussion of Findings

The study was on the implementation of office technology and management curriculum towards the acquisition of keyboarding skills in Polytechnics in Northeast, Nigeria. The findings concerning research purpose, question, and hypothesis one revealed that lecturers and HODs of OTM departments in North-east Nigeria, agreed that facilities were available in high extent for the acquisition of keyboarding skills.

The findings laid credence to the study of Amahi and Odigili (2021) who stated that instructional facilities of any course of study constitutes one of the principal determinants of the competence of the graduates and that provision of instructional facilities and other teaching and learning materials is of paramount importance in the implementation of OTM curriculum. This findings also corroborate with the study carried out by Ugbe (2018), Owenvbiugie and Ojewale (2014) and Elogbo and Akek, (2019) that instructional facilities available for implementation of OTM courses include media or automated typewriter, word processor, computer, advanced calculators, digital access system, electronic typewriter, computer, television set, tapes, radio and projectors among others coupled with competent business teachers are capable of bringing success to teaching.

The findings also, exposed that there was substantial difference between the mean ratings of lecturers in federal and state polytechnics regarding the available facilities for the implementation of OTM curriculum towards the acquisition of keyboarding skills. Therefore, the null hypothesis that states that there is no significant difference in the mean responses of lecturers in the federal and state polytechnic on the extent of available facilities for the implementation of office technology and management curriculum towards the acquisition of keyboarding was rejected.

The next findings of research purpose, question, and hypothesis two revealed that the quantitative analysis of the data collected revealed that lecturer's workload for the implementation of OTM curriculum towards the acquisition of keyboarding skills in Polytechnics in North-east is to a high extent. The findings also, exposed that there was a substantial difference between the mean ratings of male and female lecturers regarding the extent of lecturers' workload which also, shows that lecturers demonstrated a high level of support for the extent of lecturers' workload for the acquisition of keyboarding skills. The qualitative data analyzed showed that majority of the HODs stated that lecturers are not overloaded in the acquisition of keyboarding skills because some of the polytechnics that are lacking lecturers uses lecturers from sister schools in the state to take some courses in their institutions which means lecturers workload are not excessive. Therefore, the null hypothesis that states that there is no significant difference between the mean responses of male and female lecturers on the extent of lecturers' workload towards the acquisition of keyboarding skill was rejected. These findings are in consonance with the study of Osifila and Aladetan (2020) who affirmed that lecturers are presumably being stretched owing to the annual increase in the number of enrolment resulting in over bearing tasks and responsibilities for the academic staff in terms of numbers of courses to be taught per semester, numbers of periods per week, processing of results, setting of examination questions, examination invigilation, marking of examination scripts, result processing, teaching practice supervision, attendance at project, dissertation and thesis defense and supervision of undergraduate and postgraduate research work.

Conclusion

The conclusions are made based on the findings that acquisition of keyboarding skills are very much important to office mangers in the modern office. The presence of technology has changed the face of the office and the duties performed in the office therefore, office managers must be efficient in keyboarding to meet with the technological demand. This is necessary because the contemporary education requires learners to be skilled to enable graduates to be self-employed in

order to curb the dearth of unemployment. Keyboarding skills will always be used in the offices because secretaries proficiency in keyboarding enhances organizational productivity.

Recommendations

The following recommendations were advanced to channel the way forward:

1. TETFUND and managements of polytechnics should ensure that facilities are always available for effective and efficient implementation of keyboarding course for acquisition of skills.

2. To ensure students effectiveness managements and heads of departments should not allocate excessive courses to lecturers teaching keyboarding course so that they will give proper attention to the implementation of this skilled course.

References

Ademiluyi, L.F. & Okwuanaso, S. N. (2013). Influence of NBTE accreditation on the quality of administration and leadership of polytechnic office technology and management programs. *Association of Business Educators of Nigeria Journal* 1(2), 387-396.

Ademiluyi, L.F. & Ademiluyi, B.B. (2018). Influence of student industrial work experience scheme (SIWES) on the academic performance of OTM students in ICT based-courses. *Nigerian Journal of Business Education*, 5(2), 331-341.

Amahi, F.U, & Odigili, B.C. (2021). "Evaluating instructional facilities in the teaching and learning of business education courses". *Nigerian Journal Business Education*, 8(1), 229-234.

Duktur, S.L. (2016). "Innovative approaches to the teaching of financial accounting in senior secondary schools in Plateau State". *Nigerian Journal of Business Education*, 3(2), 151-157.

Edelson, D.C. (2001). Learning-for-Use: A framework for the design of technology-supported inquiry activities. *Journal of Research in Science Teaching* 38(3):355-38. Retrieved @ https://www.researchgate.net/publication/241362308_Learning-for-Use_A_framework_for_the_design_of_technology-supported_inquiry_activities

Elogbo, E.E. & Akek, M.N.G (2019). Extent of utilization of world wide web and e-mail in instructional delivery of business education in Federal Universities in South-South, Nigeria. *Nigerian Journal of Business Education*, 6(1), 217-228.

Enyekit, E.O., Ubulom, W.J., & Enyekit, K.E.O. (2016). "Pedagogical incidences of school mapping in teaching business education programme as perceived by business education students in tertiary institutions in Rivers State". *Nigerian Journal of Business Education*, 3(2), 107-115.

Esene, R.A. (2012). Assessing adequacy of the Nigerian secondary school business education Curricular for meeting the employment needs of the Nigerian youths: A case study of Delta State. *Approaches in International Journal of Research Development*, 6(1), 208-219

Essia, A.E.O. (2012). *Functionality of curriculum in Nigeria.* Nolix Educational Publications Ltd.

Federal Republic of Nigeria (2011). *National Policy on Education* (4th edition).NERDC Press.
Federal Republic of Nigeria (2004) National policy on education. NERDC.

Garba, H.J. (2011). Influence of typewriting skill on computer application among business education students in Federal Colleges of Education (Technical) Gombe. *Journal of Business Educational Research and Development*, 2(1) 51-57.

Gardner, H. (*1983*). Frames of Mind: A Theory of Multiple Intelligences. Basic *Books*.

https://www.scirp.org/(S(lz5mqp453edsnp55rrgjct55))/reference/ReferencesPapers.as

Ibrahim, F.J. (2015). "The impact of new technologies for instruction and practice in business education in a changing world". *Association of Business Educators of Nigeria Conference Proceedings,* 2(1), 207-212.

McLeod, S., *Bathon,* J., *Richardson,* J. W. (2001). Supporting effective technology integration. https://www.academia.edu/2843318/Supporting_Effective_Technology_Integration_a Implementation

Nnaji, F.O. & Pyiki, B.H. (2019). Assessment of business educators competency in teaching office administration and communication segments of Office Technology and Management courses. Dual Concepts Publishers.

Nwazor, R.A. (2012). *Improvement of Instruction in business education.* Royal Pace Publishers

Oborah, J.O. (2011). Basic ICT skills and keyboarding for office technology and management. Lagos: Adura Publishers.

Offorma, G.C. (2016). Purpose of teacher education. In Ivowi U.M.O. (ed). A book of reading in Honour of Prof. Mrs Victoria Adaobi Obasi, Imo State University, Owerri, 211-226.

Olupayimo, E.O. & Ademiluyi, L.F. (2021). Perceived effects of computer aided instruction on students acquisition of keyboarding skills in the new normal. *Association of Business Educators of Nigeria, Book of Readings,* 8(1), 101-109.

Osifila, G. I. & Aladetan, T. A (2020). Workload and lecturers' job satisfaction in Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria. Journal of Education and Learning(EduLearn),14(3),416~423

Owenvbiugie, R.O. & Ojewale, J.A. (2014). Application of new technology equipment in teaching business subjects in secondary schools in Oyo State. *Nigerian Journal of Business Education* 2(1) 10-19.

Ozuruoke, A.A. (2015). Technicalities in word processing. Thompchims Publishers and Computer Services Omoku, River State.

Ozuruoke, A.A. (2016). Office technology innovations challenges on students entrepreneurial preparation and graduates performance on the job. *ABEN Conference Proceedings*, 3(1), 767-775

Singha, C. K. S., Ong, E.T., Mohtar, T.M.T., Singh, T.S.M & Mostafae, N.A (2020). Quality teachers of the 21st century: An overview of theories and practice. *International Journal of Innovation, Creativity and Change*, 13(1), 80-93. www.ijicc.net

Ugbe, A.S. (2018). Availability and of teaching facility in business education department in colleges of education, North-West Nigeria. *Online journal of education and practice*. 9(36).

Ukaike, F.U. (2018). Office management technology education for economic growth and development in Nigeria. *Journal of Vocational Educators*, 5(1), 102-113.

Virginia Department of Education (2012). *Keyboarding methodology instructional guide for teachers and administrators*. Richmond, CTE Resource Centre.

Willer, A. (2013). *Keyboarding: What it really is and why it still has to be taught.* Knight Communication. Retrieved from https://jiji-blog.com/2018/11/skill-acquisition-definition-importance-and-strategies/