REVOLUTIONALISING TEACHING IN OFFICE TECHNOLOGY AND MANAGEMENT PROGRAMME FOR ACADEMIC DEVELOPMENT IN TERTIARY INSTITUTIONS IN EKITI STATE. NIGERIA.

OLATUNJI, Rufus Oladimeji¹, MEDAYESE, Oluwanike Olayinka², Dada Ronke Temitope³

^{1&3} Department of Office Technology & Management ³Department of Marketing, Federal Polytechnic, Ado <u>olatunji.rufus@yahoo.com, Getnikky82gmail.com, Temitoperonke6@gmail.com</u>

Abstract

This study assessed revolutionizing teaching in office technology and management programme for academic development in tertiary institution in Ekiti State. Descriptive design was adopted for this study to accurately describe the characteristics of the population and establish baseline understanding. Two research questions guides the study and two null hypotheses were formulated and tested at 0.05 level of significance. The population will consist of all lecturers in tertiary institutions in Ekiti State, while the target population will be lecturers' from four selected tertiary institutions in Ekiti State where Office technology and management programme is offered. The entire 35 lecturers was adopted as sample for the study because of the manageable size. The instrument used for the study was a structured questionnaire tagged questionnaire on the revolutionizing teaching in office technology and management programme for academic development (QROTMPAD). The instrument was validated by experts in business education and test and measurement. Cronbach Alpha was adopted for the reliability and 0.81 reliability coefficient was obtained. Data obtained from the respondents were analyzed using descriptive and inferential statistics. The findings revealed that majority of the lecturers do not make use of Google application for academic activities. Steam and virtual learning management system was not fully adopted by the lecturers to facilitate teaching and learning activities. Augmented and virtual reality were not fully utilized by OTM lecturers for instructional delivery. It was therefore concluded that OTM lecturers did not use maximally latest technological pedagogy modern technologies for teaching and learning activities. The study recommended that management and educational stakeholder in the field should infuse new technological pedagogy system of learning in OTM programme for instructional delivery. The latest information technology available in 21st century business environment should be provided for instructional delivery. OTM lecturers should be upskill on how to utilize the new pedagogical system for teaching and learning activities.

Keywords: Revolutionalizing, Office Technology and Management, Tertiary Institution, academic Development.

Introduction

Education in Nigeria has currently mainstreamed from the 1st industrial revolution in educational system into the 4th revolution in the current dispensation indicated that teaching and learning process

has transformed into more advanced stage. Teaching and learning strategies must evolve. Teaching and learning strategies must be revolutionized to accommodate new students' expectations. Students must move beyond remembering and understanding a given curriculum concept to a learning how to apply, analyze, and synthesize the learned experiences utilizing digital software and hardware in a different environment.

Education in the 21st century has transformed from the analogue pedagogical oriented into more advanced augmented reality and application of new technologies which rapidly evolving immersive learning, digital twins, wearable devices, final thought, micro learning, educational robotics, smart bots, spatial computing and automation and hyper automation has revolutionized the way educational instruction is facilitated in the tertiary institution of learning. It has tremendously enhanced the way knowledge is imparted for result oriented. This advancement and adoption of ICT permeates collaborative learning and virtual instructional delivery. Office Technology and management programme remains strategic to the economic development of the country because it seeks to provide the recipients with requisite skills, knowledge and innovation as well as advance attitudinal changes needed in the global world of work. Office technology and management programme equips students with the ability to seek investment opportunities. The emergence of modern educational technologies current trends in office technology and management programme that brought an increase in the adoption and utilization of high tech devices and software such as analytics, block chain, chatbots and artificial intelligence assistance, video stimulation and electronic devices in instructional delivery in office technology and management programme which guarantee users safety, efficiency and effectiveness and proficiency in the utilization (Amesi & Babalola, 2022)

Office technology and management programme involve integration of digital revolution that will enhance educational process, instructional delivery and teaching and learning activities. It involve collaborative innovation among all the relevant stakeholders that engages in the instructional delivery process. The lecturers, the students and the curriculum implementation stakeholders and the school management. Thus, it is expedient that education forms in OTM programme must be drastically changed and reform to accommodate flexibility in learning for optimal performance (Timya, & Duktur, 2023)

Similarly, Paul (2022) stated that OTM curriculum should be totally overhauled. The current OTM curriculum is overdue and needed changes. There are some courses that need to be upgrading to keep pace with the global standard and best practices. Course like shorthand is still relevant in the global world market and in the labour market. The skills embedded in shorthand ranges from transcription skills, Listening skills, flexibility skills, and writing skills. All the skills are demanded in the world of work by 21st century employers of labour. Umezulike and Charles (2022) remarked that employers of labour submitted that, the OTM graduates produced by higher institutions to the labour market are not employable because the skills possess by the graduates differs from the skills required in the place of work. They cannot employ the skills to set up a business venture nor secure a paid job leading to high level of unemployment and eventually resulted to high crime rate and banditries and social vices that bedeviling the country (Emeasoba, Akudolu & Agbo, 2022)

Statement of the Problem

The 21st century global world is dominated with digital skills and digital skills competencies. Thus any graduates that tends to secure a place in the world of work must possess the needed and required skills by the 21st century employers of labour. Observation from the previous researchers revealed that there was a skill gaps deficiency. The skills possess by the office technology and management graduates differs from the skills required by the employers of labour in the global labour market. Agwazie and Pac (2022). Hence, Amesi and Babalola (2022) observed that Office technology and management graduates lacks basic skills and competencies required for the profession. Notable deficiencies seems to appear in the areas of application and utilization of technologies in the business environment that differs from the one they were familiar with in the course of training.

Emeasoba, Akudolu and Agbo observed another issue of great concern on the pedagogy employed by the OTM lecturers to facilitate the teaching and learning activities which seems to be outdated, decayed and obsolete. It was also observed that, OTM lecturers have not been applying and utilizes modern technological devices and emerging educational technology currently trending in the global system in the teaching and learning process which make the graduates to be unsuitable in the labour market and half-baked. It was also observed that the OTM graduates lack the requisite competencies and proficiency needed to secure a pay job or establish their business venture and be self-reliant and they ended roaming around the street searching for job. (Umezulike and Charles 2022) Thus, based on the established problems, the study tends to revolutionizing teaching in office technology and management programme for academic development in tertiary institutions in Ekiti state. Nigeria.

Purpose of the Study

The general purpose of the study was to determine revolutionalising teaching in Office Technology and Management programme for academic development in tertiary institutions in Ekiti State. Nigeria. Specifically, the study sought to:

- 1. determine new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti state. Nigeria.
- 2. ascertain the extent to which available new modern technological pedagogy resources are utilize by OTM lecturers for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti state. Nigeria.

Research Questions

The following research questions guided the study

1. What are the available new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State, Nigeria.

2. To what extent are the available new modern technological pedagogy resources utilized by OTM lecturers for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti state. Nigeria.

Hypotheses

The following null hypotheses formulated were tested at 0.05 level of significance

Ho1: There is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria.

H02: There is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources are utilized for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria

Methodology

Descriptive survey research design was adopted for the study. The researcher considers this design appropriate for this study because it can be used to describe the existing phenomenon from the data collected from respondents on revolutionalising teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria. Thus, the researcher adopted the use of questionnaire to elicit responses from the respondents. The population will consist of all lecturers in tertiary institutions in Ekiti State, while the target population will be lecturers' from four selected tertiary institutions in Ekiti State where Office technology and management programme is offered. The entire 35 lecturers was adopted as sample for the study because of the manageable size. Five (5) OTM lecturers was selected from Federal University Oye, Ove Ekiti, (7) from Ekiti State University, Ado Ekiti, (10) from Bamidele Olomilua University of Education, Science and Technology, Ikere, Ekiti State and (13) from Federal Polytechnic, Ado Ekiti, Ekiti State. The instrument for Data collection was a self-structured questionnaire tagged "Questionnaire on the Revolutionizing Teaching in Office Technology and Management programme for Academic Development (QROTMPAD). The questionnaire was structured on a four point rating scale. The option to answer research question one are: Available, (A-4 points) Moderately Available, (MA-3points) Low Available (LA-2points) and Unavailable. (UA-1 point) and for research question 2, Very High Extent (VHE-4 points) High Extent (HE-3 points) Moderate Extent (ME-2 points) and Low Extent (LE-1 point) respectively. The instrument was validated by experts in business education and test and measurement. Cronbach Alpha was adopted for the reliability and 0.81 reliability coefficient was obtained. Data obtained from the respondents were analyzed using descriptive statistics and inferential statistics of T-test was adopted to test the two null hypotheses at 0.05 level of significant and decision was taken. The decision rule for the two research questions was

that any mean ratings of 2.50 were considered as high extent and items of mean with below 2.50 were considered as low extent. Thus, hypotheses is accepted when t-calculated value is less than t-critical value and rejected when t-calculated value is greater than t-critical value.

Results

Research Question 1: What are the available new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State, Nigeria?

Table 1: Mean ratings and Standard Deviation of OTM Lecturers on Availability of Modern Technological Pedagogy Resources for Teaching in Office Technology and Management Programme for Academic Development in Tertiary institutions in Ekiti State

S/N Pedagogy Resources	X	SD	Decision	
1. Digital Twins	3.77	0.66	A	
2. Augmented Reality	3.87	0.72	A	
3. Chatbots & AI Assistance	3.83	0.86	A	
4. Wearable Devices	3.77	0.66	A	
5. Micro Learning	3.78	0.95	A	
6. Haptic Response	3.81	0.90	A	
7. Spartial Computing	3.80	0.90	A	
8. Immersive Learning	3.84	0.79	A	
9. Automation & Hyper automation	3.83	0.78	A	
10. Interesting Stats	3.70	0.65	A	
11. Analytics	3.83	0.78	A	
12. Weblog	3.77	0.66	A	
13. Postcast	3.87	0.72	A	
14. Internet Connectivity	3.77	0.66	A	
15. Learning Management System	3.83	0.86	A	
Grand Mean	3.80	0.77		

Field work, 2025

Data presented in Table 1 above indicates that the identified modern technology resources for revolutionizing teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State are available in the institutions for instructional delivery and for teaching and learning process. This was showed from the means responses of the respondents that was above 2.50 bench mark for decision criteria.

Research Question 2: To what extent are the new modern technological pedagogy resources utilized for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State, Nigeria.

Table 2: Mean ratings and Standard Deviation of OTM Lecturers on the extent of Utilization of Available Modern Technological Pedagogy Resources for Teaching in Office Technology and Management Programme for Academic Development in Tertiary institutions in Ekiti State

N Pedagogy Resources	X	SD	Decision
1. Digital Twins	3.77	0.66	HE
2. Augmented Reality	3.87	0.72	HE
3. Chatbots & AI Assistance	3.83	0.86	HE
4. Wearable Devices	3.77	0.66	HE
5. Micro Learning	3.78	0.95	HE
6. Haptic Response	3.81	0.90	HE
7. Spartial Computing	3.80	0.90	HE
8. Immersive Learning	3.84	0.79	HE
9. Automation & Hyper automation	3.83	0.78	HE
10. Interesting Stats	3. 70	0.65	HE
11. Analytics	3.83	0.78	HE
12. Weblog	3.77	0.66	HE
13. Post cast	3.87	0.72	HE
14. Internet Connectivity	3.77	0.66	HE
15. Learning Management System	3.83	0.86	HE
Grand Mean	3.80	0.77	

Field Work, 2025

Data presented in Table 2 above revealed that the identified modern technology resources for revolutionizing teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State are available and utilized in the institutions for instructional delivery and for teaching and learning activities. This was showed from the means responses of the respondents that was above 2.50 bench mark for decision criteria.

Hypothesis 1

Ho1: There is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria.

Table 3: Summary of t-test analysis of OTM Lecturers from Federal University, Oye and Ekiti State University, Ado Ekiti on the extent to which new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria.

Variables	N	X	dF	SD	t-cal	t-crit	Decision
FUOYE OTM Lecturers	5	2.30	10	1.15	0.25	1.00	accepted
EKSU OTM Lecturers	7	2.33	10	1.17	0.25	1.98	

From Table 3, the t-calculated value of 0.25 is less than t-critical of 1.98. Thus, the null hypothesis earlier stated is therefore upheld. By implication, there is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria

Hypothesis 2

H0₂: There is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources are utilized for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria

Table 4: Summary of t-test analysis of OTM Lecturers from Federal University, Oye and Ekiti State University, Ado Ekiti on the extent to which new modern technological pedagogy resources are utilized for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria.

Variables	N	X d	F S	SD	t-cal	t-crit	Decision
FUOYE OTM Lecturers	5	2.10		1.13			accepted
		1	10		0.23	1.96	
EKSU OTM Lecturers	7	2.30	1	1.15			

From Table 3 above, the t-calculated value of 0.23 is less than t-critical of 1.96. Thus, the null hypothesis earlier stated is therefore upheld. By implication, there is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources are utilized for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria.

Discussion of Findings

The results of data analysis in table 1 showed that all the identified modern technology resources for revolutionizing teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State are available in the institutions for instructional delivery and for teaching and learning process. This was showed from the means responses of the respondents that was above 2.50 bench mark for decision criteria. This was also indicated from the grand mean of 3.80. The grand mean was also greater than the decision bench mark of 2.50. This findings of this studies corroborate the finding of Ogwunte, Agburuga, and Abung, (2023) who reported that digital resources are available in tertiary institutions for teaching and learning in business education programme. This finding was in agreement with the report of Omidiji, Abiodun, and Olatunji, (2023) who reported that Chatbots & AI Assistance, Automation and Augmented Reality are modern technology resources for revolutionize teaching in office technology and management programme. The findings of this report was in disagreement with the findings of Umezulike and Charles (2022) who submitted that business educators seems not to be too effective in their instructional delivery because on non-availability of modern technological resources.

The results of data analysis in table 2 showed that all the identified modern technology resources for revolutionizing teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State are utilized in the institutions for instructional delivery and for teaching and learning process. This was showed from the means responses of the respondents that was above 2.50 bench mark for decision criteria. This was also indicated from the grand mean of 3.80. The grand mean was also greater than the decision bench mark of 2.50. This findings of this studies corroborate the finding of Ogwunte, Agburuga, and Abung, (2023) who reported that digital resources are available in tertiary institutions and also utilized for teaching and learning in business education programme. This findings was in disagreement with the report of Emeasoba, Akindolu and Agbor (2022) who reported that business educators have not be fully utilizing modern technology for teaching and learning activities.

On the test of hypothesis 1, the result indicated that the t-calculated value of 0.25 is less than t-critical of 1.98. Thus, the null hypothesis earlier stated is therefore upheld. By implication, there is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources available for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria

On the test of hypothesis 2, the t-calculated value of 0.23 is less than t-critical of 1.96. Thus, the null hypothesis earlier stated is therefore upheld. By implication, there is no significant difference in the mean ratings of Federal University, Oye OTM lecturers and Ekiti State University OTM lecturers on the extent to which new modern technological pedagogy resources are utilized for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria.

Conclusion

Based on the findings of this study, it was concluded that the level of availability and utilization of new modern technological pedagogy resources for teaching in office technology and management programme for academic development in tertiary institutions in Ekiti State. Nigeria is very high and adequate to revolutionize office technology and management programme and equip OTM students for global competitiveness.

Recommendations

- 1. School management in tertiary institutions in Ekiti State should prioritize maintenance of the available modern technological pedagogy resources for instructional delivery in office technology and management programme.
- 2. Institutional management should send Office technology and management lecturers on up skilling seminar to utilize new modern technological pedagogy resources for instructional delivery.

References

- Amesi, J. & Babalola, J. O. (2022) Modern technologies for employability skills of office technology and management students in Rivers State Universities. *Nigerian Journal of Business Education*. 9(2), 1-12.
- Amesi, J. (2020) Human resource management and sustainable development in the 21stCentury. *Journal of Business Education* 10(1), 110-119
- Emeasoba, N. C., Akudolu, C. A., & Agbo, R. C. (2022). Utilization of digital skills for teaching and learning of business education in public Universities in the South-South, Nigerian. *Nigerian Journal of Business Education*, 9(1), 79-90
- Ogwunte, P. C, Agburuga, V. & Abung, G.O. (2023) Availability and utilization of digital resources for entrepreneurship skills acquisition in business education in Universities in Rivers State. *Nigerian Journal of Business Education*. 9(2), 84-92.
- Omidiji, S. A., Abiodun, S. A., & Olatunji, R. O. (2023). Harnessing potentials of artificial intelligence for teaching and learning office technology and management programme in tertiary institutions in Ekiti State. *Multidisplinary Journal of Arts and Language Education*. (MJALE) 4(1), 1-8
- Oyinlola, G. O., Aderoju, J. A., & Felicia, K. O. (2022) Skills-enhanced collaborative teaching and learning practices for preparing business education students towards working in a changing world. *Nigerian Journal of Business Education*, 9(1), 203-212
- Paul, V. S. (2022), Sustaining teaching and learning of office technology and management education in South-Eastern Nigeria Tertiary Institutions in the new normal era. *Nigerian Journal of Business Education*, 9(1), 1-12
- Timya, N. N. & Duktur, S. L. (2023) Interactive digital technology skills required for virtual teaching and learning of business education courses in tertiary institutions in Plateau State. *Nigeria Journal of Business Education*, 10(2), 111-120.
- Umezulike, A. N., & Charles, D. U. (2022). Collegiality teaching strategies: A mean of promoting lecturers delivery performance for quality assurance. *Nigeria Journal of Business Education*. 9(1), 100-106.