
DEVELOPING AND ENHANCING OFFICE TECHNOLOGY AND MANAGEMENT CURRICULA THROUGH DELIBERATE STRATEGIES TO MEET CONTEMPORARY EDUCATION

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Abstract

The study adopted a survey research design. The study was carried out in Delta State Polytechnics, Ogwashi Uku and Otefe-Oghara in Delta State, Nigeria. The population consisted of 26 Office Technology and Management academics in the polytechnics. All academics in the chosen polytechnics were used for the study so there was no sampling. Two research questions and two hypotheses guided the study. The instrument used for the study was questionnaire which was validated by three experts, two from Office Technology and Management plus one from Department of Measurement and Evaluation, Ebonyi State University, Abakaliki. Cronbach Alpha was used to ascertain the reliability of the instrument which yielded co-efficient of 0.80 and 0.86 for clusters 1 and 2 with a general reliability co-efficient of 0.83. A four-point response type of Strongly Agreed, Agreed, Disagreed and Strong Disagreed with 35 items assisted in data collection. Mean was used to analyze the research question; standard deviation was used to ascertain homogeneity of the responses while t-test was used to test the hypotheses. The findings of the study identified courses that could be included in Office Technology and Management programme (OTM) curriculum, the findings also identified challenges that have inhibited development and enhancement of OTM curriculum. It was concluded that some of the courses listed and identified by respondents as needed to enhance OTM curriculum should be included deliberately in OTM curriculum. It was recommended among others that, the identified courses should be incorporated into OTM curriculum to enhance the curriculum content. Also, all stakeholders should assist in reviewing and updating Office Technology and Management curriculum to meet with contemporary education.

Keywords: *Develop, Office Technology and Management curricula, Strategies, Contemporary Education.*

Introduction

Curriculum development in institutions of learning refers to the systematic process of designing, implementing and evaluating the content, structure and delivery of educational programs. It involves defining the learning objectives, content selection, course design and assessment and evaluation. Effective curriculum development is essential and required for institutions to provide high-quality education and prepare students for the future. United Nations Educational, Scientific and Cultural Organization (UNESCO) document in 2020 emphasized the importance of curriculum development as a key lever for achieving quality education and promoting sustainable development. The document highlighted the need for school curriculum to be relevant inclusive and adaptable to changing societal needs and global challenges. UNESCO advocated for rights-based approach to education and that curriculum development should consider the diverse needs for learners and promote inclusive learning environment. Other areas of concern as stated in UNESCO 2020 document includes, promoting global citizenship education, media and information literacy and lifelong learning.

Key consideration in curriculum development according to UNESCO, includes curricula should be relevant to students lives cultural contexts and future needs, the curriculum should be flexible and adaptable to changes in society, technology and knowledge involving teachers, students, parents and other stakeholders in curriculum design should include, appropriate assessment methods to evaluate students learning and progress and providing teachers with adequate training and support for effective curriculum implementation.

Curriculum development and enhancement are crucial for effective education in today's educational planning to achieve the overall objectives. Meta A.I. (2025) stated that curriculum development in institutions refers to the systematic process of designing, implementing and evaluating the content structure and delivery of educational programs. The focus of curriculum development should include defining objectives such as identifying the knowledge, skills and competencies students should acquire, content selection such as choosing relevant meaningful content course design which require organizing content into coherent modules and assessment and evaluation, such as developing methods to measure student learning and program effectiveness.

Curriculum development according to Oguche (2024), involves the implementation of different types of instructional strategies and organizational methods that are focused on achieving optimal student development and student learning outcomes. In other words, curriculum development is a process that involves institutional strategies; plans and approaches that an educational institution uses to achieve its goals and objectives. It involves organizational methods which is structure and system for delivering the curriculum, including scheduling, grouping and pacing.

Enhancement of curriculum in institutions refers to the process of improving and updating the curriculum to ensure it remains relevant, effective, and align with institutional goals and industry needs (Meta A.I., 2025). This can involve; review and revising the curriculum to reflect changes in the present day, integration of new technologies and innovative teaching methods to enhance student learning. Incorporating feedback, which involves gathering feedback from stakeholders including students, faculty and industry partners to inform curriculum development and alignment with industry needs such as ensuring the curriculum prepares students for the workforce to meet industry requirements. Effective curriculum development is essential for institutions to provide high quality education and prepare

students for success. Also by enhancing the curriculum, institutions can ensure they provide high quality education that meets the needs of students, industry and society.

Strategic curriculum development and enhancement according to Meta A.I. involve a systematic approach to designing, implementing and evaluating educational programs, which will assist in identifying learners needs, industry requirements and societal expectations and also define measurable, achievable, relevant and time-bound objectives. Other areas of importance in curriculum development and enhancement include developing relevant content that aligns with learning objectives, effective delivery methods and assist in continuous evaluation which will assist in regularly assisting and refining the curriculum. By adopting strategic approaches to curriculum development and enhancement, education programmes in institutions can be made to meet the needs of learners.

Office Technology and Management (OTM) is a nomenclature that was used to replace secretarial studies programme in Nigeria in 2004. According to Paul-Mgbeafulike and Onyeneke (2024), Office Technology and Management formerly known as secretarial studies in Nigeria evolved out of a need to meet the technological and managerial demands of today's workplace. Ikelegbe (2023), position that Office Technology and Management programme is concerned with training students to acquire skills, understanding, attitudes, work habits and competencies that are requisite to success in office management occupations. The OTM programme was basically design to produce students who would effectively manage the electronic driven office and who would be equipped with secretarial and office skills for employment in various fields of endeavor. In the views of Umoru and Enonche (2021), OTM programme is a skill, administrative and management programme of study aimed at preparing recipients for office job and/or to become self-employed. The teaching of courses in the programme according to the authors requires great skills and competencies needed to impact knowledge into recipients.

Office Technology and Management as a programme according to Ofulue (2024) is an aspect of vocational and technical education that focuses on equipping students with skills for effective operations in modern offices. In line with the views of Ofulue, Dibbari and Abubakar (2020), described OTM as a component of vocational education that training and prepares students for gainful jobs in modern offices. This aspect of vocational education (curriculum) provides individuals with the competences required in performing effectively in modern offices. Ogunleye (2021) started that vocational education is generally structured to motivate students toward cultivating potentials for entrepreneurial pursuit after graduation, that is why the curriculum is focused on provision of practical skill that are required by graduate to contribute to society.

Contemporary education according to Meta A.I. (2025) is the current state and practices of education in the modern world, reflecting prevailing educational methods, theories, technologies and societal influences. It's a dynamic and evolving field that adapts to changing needs of students, society and the workforce. Some key features of contemporary education according to Meta AI include student-centered learning, flexibility and adaptability, holistic development, lifelong learning, integration of technology, personalized learning and collaborative learning. Overall, contemporary education prioritizes developing well-rounded individuals with the skills, knowledge, and adaptability to succeed in an ever-changing world.

The curriculum of OTM however, was reviewed last in 2004, which make it 21 years behind the present year. Two decades is more than enough to call for a review or enhancement

because the landscape of modern offices is going through transformation as never before which is brought about by rapid advancement of newer and rapid technology such as artificial intelligence. If we must brace up with the present education in the modern world, OTM curriculum planners must think beyond the present times to achieve what is necessary for the future.

Statement of the Problem

Office Technology and Management curriculum was reviewed 21 years ago and its implementation according to Azuka in Akpotowho (nd) was not thorough due to the fact that over 80% of lecturers at its implementation stage lack the mechanism for teaching ICT and entrepreneurship education courses plus the current trend in office modernization brought about by rapid technology especially with the inroad of artificial intelligence.

Ojo (2018) posited that there is a consensus among educationist and researchers that students poor performance is being experienced daily. This means something must be done since performance is a key index by which the effectiveness and success of any educational institution could be measured. The OTM curriculum need to be strengthen and enhance in other to up scale the capabilities of teachers and students to achieve effective training of students for modern jobs in the industry and for self-employment. The researchers are therefore worried as to how the objectives of OTM programme can be achieved.

Purpose of the Study

The main purpose of the study is to determine how to develop and enhance Office Technology and Management curricula through deliberate strategies to meet contemporary education. Specifically, the study examined:

1. The courses that could be included deliberately in the curriculum of OTM programme to enhance its objectives in training to meet contemporary education.
2. The challenges inhibiting development and enhancement of OTM curriculum to meet its training objectives for modern 20 years.

Research Questions

The following research questions guided the study:

1. What are the courses that could be included deliberately in the curriculum of OTM programme to enhance its objectives in training to meet contemporary education?
2. What are the challenges inhibiting development and enhancement of OTM curriculum to meet its training objectives for more than 20 years?

Research Hypotheses

The following hypotheses which were tested at 0.05 level of significance guided the study.

- H₀₁: There is no significant difference in the mean ratings of male and female OTM academics, on the courses that could be included in the OTM programme curriculum to enhance its objectives of training to meet contemporary education.

H₀₂: There is no significant difference in the mean ratings of academics in DSPG and academics in DSPT on the challenges inhibiting development and enhancement of curriculum to meet training objectives for more than 20 years.

Methods

The study adopted descriptive research design. The population of the study comprised of 26 academics staff of Delta State Polytechnics, Ogwashi-Uku and Otefe-Oghara. Two purposes of the study, two research questions and two hypotheses guided the study. The entire population was studied so there was no sampling. A structured questionnaire titled “Developing and Enhancing Office Technology and Management Curriculum Questionnaire (DAEOTMQ) with two sections, A and B were design to carry out the study.

The questionnaire was a four point likert rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), that was weighted 4,3,2 and 1 respectively to assist respondents to choose their preferred answers. The instrument was validated by three research experts, one from the department of Measurement and Evaluation, Ebonyi State University, Abakaliki, plus two from Delta State Polytechnic, Ogwashi-Uku. The internal consistency of the instrument was tested using Cronbach Alpha method which yielded overall coefficient of 0.86. The administration and collection of the instrument was done by the researchers and one research assistant. Data collected relating to the research questions were analyzed using mean and standard deviation, while t-test was used to test the null hypotheses at 0.05 level of significance. The analysis was done using the statistical package for social science (SPSS 2.0). A mean score of 2.50 was the benchmark for accepting while mean score below 2.50 was rejected. For the hypothesis testing, if the calculated t-value is less than the critical value, the calculated value is accepted. Where the calculated t-value is equal to or greater than the critical value, the hypothesis is rejected.

Results

Research Question One: What are the courses that could be included to the curriculum of Office Technology and Management programme deliberately to enhance its objectives of training students to meet modern requirement?

Table 1: Mean ratings and standard deviation of respondents on courses that could be included to curriculum of OTM.

S/N	Items	Mean	SD	Remarks
1.	Artificial intelligence (AI)	3.46	0.86	Agree
2.	Machine learning (ML)	2.96	0.82	Agree
3.	Cloud computing	3.11	0.90	Agree
4.	Data analytic and visualization	3.30	1.01	Agree
5.	Cybersecurity	3.23	0.81	Agree
6.	Digital marketing	3.11	0.95	Agree
7.	E-commerce and online business	3.42	0.85	Agree
8.	Mobile application development	3.19	1.02	Agree
9.	Virtual and augmented reality	3.15	0.92	Agree
10.	Blockchain and cryptocurrency	2.42	0.85	Disagree
11.	Microsoft office 365	3.57	0.70	Strongly agree
12.	Google workspace technology	3.42	0.70	Agree
13.	Graphic design	3.26	1.00	Agree
14.	Visual communication	3.61	0.89	Strongly agree

15.	Digital collaboration tools	3.38	0.75	Agree
16.	Project management software	3.46	0.76	Agree
17.	Digital communication and etiquette	3.50	0.76	Strongly agree
18.	Time management and productivity	3.65	0.74	Strongly agree
19.	Adaptability and continuous learning	3.30	0.97	Agree
	Grand Mean	3.26	0.84	Agree

Results in Table 1 show that items no. 11, 14, 17 and 18 have mean scores of 3.57, 3.61, 3.50 and 3.65 which indicate strongly agree. Item no. 10 has mean score of 2.42 which indicate disagree. All other mean scores are within 2.96 – 3.46 which indicates Agree. The standard deviation ranges from 0.70 and 1.02, which implies that responses from respondents were tightly clustered around the mean.

Research Question Two: What are the challenges inhibiting developing and enhancement of OTM curriculum for more than 20 years?

Table 2: Mean ratings and standard deviation of respondents on challenges inhibiting developing and enhancement OTM curriculum for more than 20 years.

S/N	Items	Mean	SD	Remarks
1.	Attitude of polytechnic supervising body is not encouraging curriculum enhancement and development	3.42	0.92	Agree
2.	Inadequate provision of budgetary allocation for curriculum development and enhancement	3.57	0.58	Strongly agree
3.	Lack of professional development opportunities for lecturers	3.23	0.81	Agree
4.	Insufficient stakeholders engagement to facilitate curriculum enhancement	3.26	0.82	Agree
5.	Bureaucratic processes and slow approval mechanisms causes delay in curriculum enhancement	3.50	0.76	Strongly agree
6.	Rapid technological advancement causes distraction as to the direction of curriculum enhancement	3.03	1.03	Agree
7.	Difficulty in establishing and maintaining partnerships with relevant industries	3.07	0.68	Agree
8.	Funding constraints both internal and external	3.73	0.45	Strongly agree
9.	Computing priorities within the institution, lead to delayed curriculum enhancement and development	3.03	0.99	Agree
10.	Communication breakdown leads to delay	2.92	0.89	Agree
11.	Lecturers reluctance to adopt new technologies of teaching methods	2.88	0.95	Agree
12.	Lack of data-driven decision to get proper information on curriculum development and evaluation	3.03	0.82	Agree
13.	Inadequate of institution based resources for supporting curriculum enhancement and development	3.11	0.86	Agree
14.	Enhancing and developing a modern curriculum will cause significant negative changes in existing OTM curriculum	2.46	1.14	Disagree
15.	Lack of knowledge on the part of lecturers to assist	2.76	0.90	Agree

	institution on areas to include in the OTM curriculum for its enhancement			
16.	Inconsistent development of academic staff skills to aid in curriculum enhancement and development	3.07	0.89	Agree
	Grand Mean	3.16	0.84	Agree

Results in Table 2 indicate that items 2, 5, and 8 have mean scores of 3.57, 3.50 and 3.73 respectively which are strongly agree. While item 14 has mean score of 2.46 which is disagree. All other items have mean score that ranges from 2.76 to 3.42 which is rated agree. The answers to the standard deviation which is within 0.58-1.03 except item number 14 whose standard deviation is 1.14. It could be agreed that respondents views are not far apart.

Hypotheses Testing

H₀₁: There is no significant difference in the mean ratings of male and female OTM academics on courses that could be included to the curriculum of OTM to enhance its objectives of training to meet contemporary education.

Table 3: t-test analysis of respondents of male and female academics on courses that could be included in the curriculum of OTM to enhance its objectives.

Respondents	N	Mean	SD	Df	t.cal	t.crit	Decision
Male academics	11	3.18	0.70	24	0.50	1.96	Not significant
Female academics	15	3.37	0.42				

The data in Table 3 reveals that the calculated t-value of 0.50 is less than the critical t-value of 1.96 at 24 degree of freedom and 0.05 level of significance. This implies that the null hypothesis which states that there is no significant difference between male and female respondents of academics staff on courses that could be included to OTM curriculum to enhance its objectives of training to meet contemporary education is accepted.

H₀₂: There is no significant difference in the mean ratings of academics in DSPG and academics in DSPT on the challenges inhibiting development and enhancement of OTM curriculum to meet training objectives for more than 20 years.

Table 4: t-test analysis of respondents of academics in DSPG and academics in DSPT on the challenges inhibiting development and enhancement of OTM curriculum to meet training objective for more than 20 years.

Respondents	N	Mean	SD	Df	t.cal	t.crit	Decision
DSPG academics	14	3.31	0.32	24	0.62	1.96	Not significant
DSPT academics	12	3.20	0.45				

The data in Table 4 shows that the calculated t-value of 0.62 is less than table value of 1.96 at 24 degree of freedom and 0.05 level of significant, the researcher therefore uphold the null hypothesis that there is no significant difference in the mean ratings of DSPG academics and DSPT academics on the challenges inhibiting development and enhancement of OTM curriculum to meet training objectives for more than 20 years.

Discussion of Findings

The study identified courses that could be included in OTM curriculum to develop and enhance its objectives. They include courses in artificial intelligence, cloud computing, data analytic and visualization, cybersecurity, digital marketing, e-commerce and online business, virtual and augmented reality, Microsoft office 365, Google workspace technology, graphic design, visual communication, digital collaboration tools, project management software, digital communication and etiquette, time management and productivity, and adaptability and continuous learning. This study corroborate the views of Oviawe & Ehirheme in Olusegun (2023) that, attaining social, economic and environmental transformation requires a paradigm shift in education, curriculum re-orientation, reviewing of courses and teaching and learning strategies that meet the needs of both current and future generations. The study is in line with Itari and Ugbe (2018) when in their study concluded that, the peculiarity of twenty-first century which is characterize by diverse career paths, professional paths, changing workplace practices, and new technologies, make it imperative to engage learners in more active forms of learning. This means curriculum should be enhance to accommodate the times and technologies in the present century.

The study also identified challenges that has inhibited developing and enhancing office technology and management curriculum, these include attitude of polytechnics supervising body, inadequate provision of budgetary allocation for curriculum development, lack of professional development opportunities for lecturers, insufficient stakeholders engagement, bureaucratic processes, rapid technological advancement, difficulties in establishing and maintaining partnerships, internal and external funding constraints, competing priorities within the institutions, communication breakdown, other includes lecturers reluctance to adopt new technologies for teaching, lack of data driven decision, inadequacy of institution based resource to support curriculum enhancement, lack of knowledge on the part of lecturers to assist institutions and inconsistent development of academic staff skills to aid in curriculum development.

Umoru and Adakole's (2023) study is in support of the present study when they reported that poor funding contribute to the challenges of curriculum development and implementation. The findings of the present study is in line with findings of Okoye and Agu (2024), which identified human and instructional/physical challenges that are affecting curriculum innovations. It is imperative therefore for institutions offering OTM programme to develop means to enhance and improve the curriculum to accommodate the present ere.

Conclusion

Based on the findings of the study, it was concluded that some of the courses listed during the research should be included deliberately in OTM curriculum to enhance the objectives of training. It was also established that there are challenges that inhibits the development and enhancement of OTM curriculum.

Recommendations

The following recommendations are made in the light of the study's findings:

1. Office technology and management programmes should endeavor to incorporate relevant and contemporary courses into the curriculum as it will enhance the curriculum content and allow students to develop understanding of subject matter,

leading to better academic performance. Also, such activity i.e. updating the curriculum to meet the present need can foster student engagement and motivation which can lead to higher students' satisfaction.

2. In order to mitigate some of challenges identified, all stakeholders in the polytechnic system such as government, NBTE, lecturers and management of polytechnics should endeavor to put more efforts in order to assist in updating OTM curriculum in order to meet the objectives of training students not only for the present but also the future.

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