IMPLEMENTERS' RATINGS OF RESOURCE CHALLENGES FACING OFFICE TECHNOLOGY AND MANAGEMENT PROGRAMME IN POLYTECHNICS IN SOUTH-EAST, NIGERIA

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Abstract

This study on implementer's ratings of resource challenges facing Office Technology and Management (OTM) programme in polytechnics in South-East, Nigeria, was necessitated by the need to enhance the quality and product of the programme. Four research questions guided the study and four hypotheses were tested. The study adopted a descriptive survey research design. The population of the study comprised 92 OTM lecturers in all the six polytechnics offering OTM programme in South-East, Nigeria. The entire population was used for the study because the size was small and manageable; therefore, there was no sampling. A self structured questionnaire was developed by the researcher titled "Questionnaire on Resource Challenges facing Office Technology and Management Programme". The instrument was face validated by three experts. The instrument was trial tested using Cronbach Alpha to calculate the internal consistency of the instrument and an overall reliability index of 0.83 was obtained. Arithmetic mean and standard deviation was used to answer the research questions, while t-test was used to test the null hypotheses at 0.05 level of significance. The findings of the study revealed that the implementers strongly agreed that resource challenges facing OTM programme in the South-East, Nigeria include: ICT, material, humanand instructional resources. Furthermore, institution ownership significantly influenced implementers' ratings on human resource challenges only. Based on these findings, it was recommended among others that modern ICT equipment and facilities required inteaching Office Technology and Management courses should be adequately provided to enhance teaching and learning in OTM programme.

Key Words: implementers, ratings, resource challenges, office technology & management, programme

Introduction

Office Technology and Management Programme (OTM) as a course of study in polytechnics is recognized as a tool for economic and social empowerment of any nation.Office Technology and Management (OTM) was designed to replace the Secretarial Studies offered in Nigerian polytechnics (FRN, 2013).Office Technology and Management (OTM) became the new name for the former Secretarial Studies programme offered in Nigerian polytechnics as approved in 2004 by the National Board for Technical Education (NBTE) which is the supervisory body for polytechnics in Nigeria.

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Sequel to the change in the programme title, the Secretarial Studies curriculum was reviewed and improved upon based on developments in technology and the need for improvement in the way things are done for societal development. It was based on these needs that the NBTE embarked on a comprehensive review of all minimum guide curricula from 2001 which sought to radically transform the polytechnic programmes to meet new technological and socio-economic trends and demands of the world of work. In this regard, Ojukwu (2009) observed that the objectives, theoretical and practical contents of the current OTM curriculum aim at making graduates of the programme fit for effective work performance in this present world of technology.

Following the changes in the curriculum and the nomenclature of the programme, more emphasis and importance is now placed on the skill acquisition as the focal point in word processing, spreadsheet and other ICT-related skills (Baba & Akarahu, 2012). OTM is used as a comprehensive term referring to those aspects of the educational process involving general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

Office Technology and Management programme is run at National Diploma (ND) and Higher National Diploma (HND) levels. The aim is to equip students with vocational skills in the field of socio-psychological work skills for employment in various areas of endeavour. This is in line with FRN (2013) which provided that education has the aim of equipping students with appropriate skills, abilities and competencies both mental and physical to enable them to live in and contribute to the development of the society. In the same vein, Adelakin (2009) posited that the OTM programme was designed for two major reasons; first, as a response to the yearnings of the secretarial studies students and practitioners on the need to change the name of the programme which seem to make only suitable for the traditional office environment. Secondly and most importantly, as a result of the change in the curriculum with more emphasis on Information and Communication Technology (ICT) and management in order to enrich students' knowledge and equip them with skills needed in today's office environment.

The aim of the OTM programme, according to Dolor in Ogheneovo, (2013), is to impart skills, knowledge and competencies, which make the beneficiaries self-reliant. However, polytechnics in Nigeria and South-East in particular still seem to fail in the actualization of this over-arching programme. The goal of the government is to make efforts to ensure high quality delivery system in polytechnic education for the benefit of the learners and the larger society. Polytechnics in Nigeria in general and South-East Nigeria in particular are not merely a different set of institution of higher learning, as they are not just the hub of learning and research but also institutions where technological knowledge and skills are acquired for direct application in solving the problems of the society (Azuka in Okey-Colbert, 2017). However, it seems that these polytechnics are still far from achieving the goals and objectives of OTM programme as stipulated in the Federal Republic of Nigeria (FRN 2013) due to different implementation challenges.

Implementers are a group of persons that are assigned to guide written document that stipulate methods that could be used to attain intended goals at the end of the programme (Jadhav & Patankar, 2013). Carl (2009) viewed programme implementers as designated people that are usually involved in the process of creating planned syllabus, teaching, training and exhibition modes. In the context of this study, programme implementers are a set of knowledgeable, experienced and competent persons that take the responsibility of introducing

the curriculum in the classroom. They are OTM educators in polytechnics responsible for teaching and learning delivery. According to Ejiofor in Amaiya (2014), the teachers as the implementers of curriculum, innovators and custodians of knowledge always require appropriate training, facilities, tools and motivation for effectiveness and technological advancement. Where these resources are lacking or inadequate the implementers may not function as required for effective implementation, hence, the realization of programme objectives will be limited by these resource challenges.

Resources are basic requirements that aid and facilitate effective teaching and learning. According to Ibitoye in Ogundele (2015), resources are those types of human and financial variables that are put in place towards enhancing effective instructional delivery. Examples of resources in OTM programme according to Ogundele include computer facilities, consumable materials and infrastructure (classrooms, lecture theatres, libraries, and workshops). Furthermore, Onyesom and Okolocha (2013) posited that resources are those basic requirements that aid and facilitate effective teaching and learning. More so, resources are those materials or services that facilitate teaching and learning in schools. Unavailability or inadequacy of resources poses a great challenge to OTM programme implementation.

Challenge refers to issues bedeviling pre-determined goals and objectives (Manabete & Makinde, 2016). This is why Ugwuanyi and Eze in Ogheneovo (2013) asserted that OTM as an academic programme can only be effectively implemented with adequate resources. Ugwuanyi and Eze further held that the major resource challenge facing OTM programmes in polytechnics in Nigeria include ICT and human resources. Others include instructional, infrastructural and material resources.

Resource challenges are impeding factors to the development of OTM programmes. Resources are fundamental and potent factors in any organization. According to Owoeye and Tara (2011), resources are seen as educational resources that are vital determinant of academic achievement. Resources in education are those basic requirements that aid and facilitate effective teaching and learning. Resource challenges are obstacles that hinder both human and non-human materials such as site buildings, machines, laboratory and its equipment, learner's tools for the purpose of administration, teaching and learning and research processes (Mmou & Olutola, 2000).

According to Onyesom and Okolocha (2013), resource challenges are those basic requirements that are lacking to aid and facilitate effective teaching and learning. In the view of Manabete and Makinde (2016), resources are those materials or services that are not in place so as to facilitate teaching and learning in schools. This suggests that resources are very important in view of its role in the achievement of educational objectives and goals. In the context of this study, resource challenges refer to lack or inadequacy of all forms of instructional resources (human, equipment and materials) that could aid OTM instructors/lecturers in effective curriculum implementation.

Office Technology and Management (OTM) is defined as a programme of instruction aimed at developing skills, knowledge and understanding that are necessary to facilitate business information control and processing (Osuala, 2009). According to Eneche and Audu (2014), OTM is an educational programme that imparts the skills of planning, organizing, directing and controlling office activities to ensure that various resources (human and materials) are put into optimal utilization so as to achieve the aim of an organisation. OTM is a new nomenclature for

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secretarial studies programme in polytechnics in Nigeria. This change and new design was an initiative of the National Board for Technical Education (NBTE) (2004) to replace the Secretarial Studies programme offered in Nigerian polytechnics.

Office Technology and Management (OTM) is used as a comprehensive term referring to those aspects of the educational process involving general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (Atueyi, 2010). In the context of this study, OTM is education designed to develop skills, abilities, understanding, attitudes, work habits and appreciation encompassing knowledge and information needed by workers to enter and make progress in employment on a useful and productive basis.

Statement of the Problem

The new OTM programme in Nigerian polytechnics is an improvement of the old Secretarial Studies programme. The ND and HND programmes were expanded with the inclusion of professional courses which are computer-based with higher practical units. Following the development of OTM, lecturers are expected to equip students with relevant competencies to assure quality in the programme. This would enable graduates to effectively and efficiently produce office documents and reports using such applications as word processor, spreadsheet, graphics, access and internet for office operations and communication through the knowledge of web pages, among others.

The researcher's personal experience in form of observations and interactions with OTM stakeholders which included: lecturers, instructors, students, and OTM graduates as well as employers of labour in South-East, Nigeria, in her more than ten years of working as a Secretary, indicated that the performance of OTM graduates in the world of work are below expectation. Majority of the OTM graduates will not produce a mailable or useable document with little or no supervision. Some of them have great phobia for computer. They lose their courage whenever there is need to use Microsoft Excel, PowerPoint, PDF, internet, etc to process, store, share and distribute information, knowledge and ideas. This situation of OTM graduates in South-East, Nigeria could be as a result of diverse resource challenges in the implementation of the curriculum. Such resources could be technological, human material, instructional and among others. In a situation where all or some of these resources are inadequately supplied quality of teaching and learning will be compromised and graduates will lack requisite competencies for success in employment. The situation on resource challenges for OTM programme implementation in polytechnics in South-East, Nigeria is not clear, hence this study on implementers' rating of resource challenges facing OTM programmein polytechnics in South-East, Nigeria. This will reveal the areas of inadequacy to provide relevant stakeholders with empirical evidence for objective remedial actions.

Objectives of the Study

The main purpose of the study is to ascertain the ratings of implementers on resource challenges facing OTM programme in polytechnics in South-East, Nigeria. In specific terms, the study seeks to determine OTM programme implementers' rating of:

1. Information and Communication Technology (ICT) resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria.
2. Material resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria.

3. Human resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria.

Research Questions

The following research questions guided the study.

4. What is the rating of implementers on Information and Communication Technology (ICT) resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria?
5. What is the rating of implementers on material resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria?
6. What is the rating of implementers on human resource challenges facing in the Office Technology and Management programme in polytechnics in South-East, Nigeria?

Hypotheses

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

1. There is no significant difference between the mean ratings of implementers from federal and state owned polytechnics on Information and Communication Technology (ICT) resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria.
2. There is no significant difference between the mean ratings of implementers from federal and state owned polytechnics on material resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria.
3. There is no significant difference between the mean ratings of implementers from federal and state owned polytechnics on human resource challenge faced in Office Technology and Management programme in polytechnics in South-East, Nigeria.

Methodology

The study adopted descriptive survey research design. This is considered appropriate for the study because it involves gathering the opinions of a given population with the use of a questionnaire to arrive at the decision on resource challenges facing Office Technology and Management (OTM) programme. The study was carried out in the polytechnics in the South-East region of Nigeria. The choice of this area for the study was informed by the widespread reports of resource challenges affecting the standard of education especially in the polytechnics. The population of the study comprised of ninety two (92) OTM lecturers in all the six (6) polytechnics offering Office Technology and Management programme in the South-East, Nigeria namely: Abia State Polytechnic 14, Imo State Polytechnic 14, Federal Polytechnic Oko 22, Federal Polytechnic Uwana 16, IMT 7 and Federal Polytechnic Nekede 19.. The entire population was used for the study because the size is small and manageable; therefore, there was no sampling.

Data for the study was collected by using a structured questionnaire developed by the researcher, after extensive review of literature and consultation with experts in the field. The instrument was titled “Questionnaire on Resource Challenges facing Office Technology and Management Programme”. It has two main sections of A and B. Section A contained two items on the personal data of the respondents, while Section B was split into clusters B1-B4, with 39

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questionnaire items. This section was also structured on a four point scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The face validity of the instrument was established using the opinions of three experts, two were Business Educators from the Department of Technical and Vocational Education; and one in Educational Measurement and Evaluation from the Department of Educational Foundations, all in the Faculty of Education, Nnamdi Azikiwe University, Awka. The reliability of the instrument was ascertained by administering the instrument to twenty (20) OTM lecturers in Delta State Polytechnic, Ogwashi-Uku, which was not part of the population of the study. Cronbach Alpha was used to calculate the internal consistency of the instrument and reliability values of 0.89, 0.78, and 0.74 were obtained for clusters B1 – B3 respectively. The overall reliability index of was 0.80 which considered high enough.

Copies of the questionnaire were administered personally by the researcher with the help of four research assistants. A total of 88 copies of the questionnaire were retrieved, this represented a return rate of 96 percent. Arithmetic mean was used to answer the research questions and standard deviation was used to determine the homogeneity or otherwise of the respondents' mean scores. However, t-test was used to test the null hypotheses at 0.05 level of significance. Where the p-value is less than the alpha level ($p<0.05$), the null hypothesis was rejected but where it is equal to or greater than the alpha level ($p\geq0.05$), the null hypothesis was accepted. The analysis was done with the Statistical Package for Social Sciences (SPSS) version 23.

Results/Findings

Research Question 1: What is the rating of implementers on Information and Communication Technology (ICT) resource challenges facing Office Technology and Management (OTM) programme in polytechnics in South-East Nigeria?

Table 1: Respondents' mean ratings on Information and Communication Technology (ICT) resource challenges facing Office Technology and Management (OTM) programme in polytechnics in South-East Nigeria

S/N	Item Statements	X	SD	Remarks
1	Poor utilization of e-learning	3.63	0.49	Strongly Agree
2	Inadequate number of computer systems	3.47	0.50	Agree
3	Inadequate ICT facilities	3.36	0.48	Agree
4	Inadequate ICT infrastructures	3.45	0.50	Agree
5	Non functional ICT equipment	3.51	0.47	Strongly Agree
6	Insufficient printers	2.41	0.61	Disagree
7	Lack of internet access for students and lecturers	3.39	0.59	Agree
8	High cost of acquisition and maintenance of ICT facilities	3.57	0.53	Strongly Agree
9	Inadequate time allocated for ICT-related instructions, training and practice	3.07	0.67	Agree
10	Haphazard integration of ICT into OTM curriculum	3.35	0.55	Agree
	Cluster Mean	**3.32**		**Agree**

Table 1 revealed that the respondents disagreed with only one item with the mean score of 2.41. This means that printers are sufficiently available and is not a resource challenge facing Office Technology and Management (OTM) programme in polytechnics in South-East, Nigeria.

The remaining nine items with mean ratings ranging between 3.07 and 3.63 indicated that the respondents agreed that they were ICT resource challenges facing Office Technology and Management programme. The cluster mean of 3.32 indicate that OTM programme in polytechnics in South-East, Nigeria is faced with several ICT resource challenges. The standard deviation scores ranging from 0.47 – 0.67 are within the same range showing that the respondents are homogenous in their views.

Research Question 2: What is the rating of implementers on material resource challenges facing Office Technology and Management (OTM) programme in polytechnics in South-East Nigeria?

Table 2: Respondents' mean ratings on material resource challenges facing Office Technology and Management (OTM) programme in polytechnics in South-East Nigeria

S/N	Item Statements	X	SD	Remarks
11	Dearth of modern equipment like photocopy machines, stapler, stapling pin etc	3.45	0.54	Agree
12	Insufficient provision of white board marker in classrooms	2.32	0.64	Disagree
13	Insufficient computer ink and paper	3.06	0.72	Agree
14	Insufficient provision of white boards in classrooms	3.39	0.66	Agree
15	Inadequate laboratories and classrooms	3.46	0.59	Agree
16	Consumable materials are not supplied	3.50	0.64	Strongly Agree
17	Epileptic power supply	3.52	0.71	Strongly Agree
18	Inadequate supply of office machine equipment	3.47	0.79	Agree
19	High cost of purchasing material resources	3.15	0.68	Agree
20	High cost of maintaining material resources	3.36	0.65	Agree
	Cluster Mean	**3.27**		**Agree**

Data in Table 2 revealed the respondents disagreed with only one item with the mean score of 2.32. This means that white board marker is sufficiently available and not a resource challenge facing Office Technology and Management (OTM) programme in polytechnics in South-East Nigeria. The remaining nine items with mean ratings ranging between 3.06 and 3.52 indicated that the respondents agreed that there were material resources facing Office Technology and Management programme. The cluster mean of 3.27 indicate that Office Technology and Management programme in polytechnics in South-East, Nigeria is faced with several material resource challenges. The standard deviation scores ranging from 0.54 – 0.79 are within the same range showing that the respondents are homogenous in their views.

Research Question 3: What is the rating of implementers on human resource challenges faced in the Office Technology and Management (OTM) programme in polytechnics in South-East, Nigeria?

Table 3: Respondents' mean ratings on human resource challenges faced in the Office Technology and Management (OTM) programme in polytechnics in South-East, Nigeria

S/N	Item Statements	X	SD	Remarks
21	Inadequate number of qualified academic staff	3.53	0.50	Strongly Agree

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22	Poor system of staff recruitment	3.50	0.71	Strongly Agree
23	Inadequate leadership skills	3.38	0.61	Agree
24	Shortage of qualified computer technologists	3.29	0.73	Agree
25	Absence of orientation for newly recruited academic staff	2.36	0.98	Disagree
26	Inadequate number of academic staff	3.19	0.80	Agree
27	Shortage of skilled ICT technologists	3.44	0.68	Agree
28	Poor supervision	3.43	0.65	Agree
29	Lack of required competencies in the utilization of ICT resources	3.36	0.73	Agree
30	Lack of motivation for ICT instructors	3.34	0.64	Agree
31	Lack of incentives for ICT instructors	3.37	0.66	Agree
32	Poor mentoring on ICT usage	3.34	0.64	Agree
	Cluster Mean	**3.29**		**Agree**

Table 3 revealed that the respondents disagreed with only one item with the mean score of 2.36. This means that there is sufficient orientation for newly recruited academic staff and is not a resource challenge in Office Technology and Management (OTM) programme in polytechnics in South-East, Nigeria. The remaining eleven items with mean ratings between 3.19 and 3.53 indicated that the respondents agreed that there were human resource challenges facing Office Technology and Management programme. The cluster mean of 3.29 indicated that Office Technology and Management (OTM) programme in polytechnics in South-East, Nigeria is faced with several human resource challenges.The standard deviation scores ranging from 0.50 – 0.98 are within the same range showing that the respondents are homogeneous in views.

Hypothesis 1

Table 5: Summary of t-test analysis of the significance of difference in the mean ratings of respondents from federal and state owned polytechnics on Information and Communication Technology (ICT) resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria

Variables	N	X	SD	Df	p-value	α-value	Remark
Federal	49	34.86	1.99				
				86	0.876	0.05	Not significant
State	39	34.92	1.94				

Data in Table 5 showed that the p-value of 0.876 with 86 degree of freedom and α - value of 0.05. Since the p-value of 0.876 is greater than the alpha level of 0.05 *(0.876 > 0.05)*, This indicates that there is no significant difference between the mean ratings of respondents from federal and state owned polytechnics on Information and Communication Technology (ICT) resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria. Therefore, the null hypothesis is not rejected.

Hypothesis 2

Table 6: Summary of t-test analysis of the significance of difference in the mean ratings of respondents from federal and state owned polytechnics on material resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria

Variables	N	X	SD	Df	p-value	α-value	Remark

Federal	49	34.55	3.11				
				86	0.439	0.05	Not significant
State	39	35.05	2.85				

Data in Table 6 showed that the p-value of 0.439 is greater than the alpha level of 0.05 *(0.439 > 0.05)*. This indicates that there is no significant difference between the mean ratings of respondents from federal and state owned polytechnics on material resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria. Therefore, the null hypothesis is not rejected.

Hypothesis 3

Table 7: Summary of t-test analysis of the significance of difference in the mean ratings of respondents from federal and state owned polytechnics on human resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria

Variables	**N**	**X**	**SD**	**Df**	**p-value**	**α-value**	**Remark**
Federal	49	40.86	4.47				
				86	0.782	0.05	Not significant
State	39	40.59	4.49				

Data in Table 7 showed that the p-value of 0.782 is greater than the alpha level of 0.05 *(0.782 > 0.05)*. This indicates that there is no significant difference between the mean ratings of respondents from federal and state owned polytechnics on human resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria. Therefore, the null hypothesis is not rejected

Discussions of Findings

Information and Communication Technology (ICT) resource challenges facing Office Technology and Management (OTM) programme in polytechnics

The findings revealed that implementers agreed that several ICT resource challenges are facing the programme in polytechnics in South-East, Nigeria. This finding implies that there still exists dearth of ICT resource challenges in OTM programme in polytechnic. These challenges include poor utilization of e-learning, inadequate computers, ICT facilities, infrastructure and equipment. This finding supported that of Amiya (2013) that ICT resources such as projector, teleconferencing, cybercafé, lack of access to ICT resources, shortage of skilled ICT educators among others were challenges for effective utilization of ICT in teaching and learning in OTM programme. The researcher believed that the reason why this situation is still as it was in 2013 when it comes to ICT resource challenges facing OTM programme in polytechnics could be as a result of the management of the polytechnics not been able to implement the budgetary allocation meant to procure these ICT resources.

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Furthermore, findings revealed that gender did not significantly influence the mean ratings of the implementers on ICT resource challenges facing OTM programme in polytechnics in South East Nigeria. This finding agrees with that of Amiaya (2015) that there was no significant difference between the mean responses of male and female OTM educators on the challenges that hinder the effective utilization of ICT in the programme in polytechnics in South-South, Nigeria. On this aspect, the issue of gender did not affect the resource availability and utilization, but rather the leadership styles of the implementers of the programme can only be the determinant. So, the issue of gender is not a critical aspect of the programme implementation.

The finding, however, disagrees with Amiaya (2015) that there was significant difference in the mean response of OTM educators on the challenges that hinder the effective utilization of ICT in the programme in polytechnics in South-South based on institution ownership (federal and state). The variation in the difference could be as a result of different opinions of OTM educators based on geographical location. This could be as a result of fact the federal owned polytechnics receive more budgetary allocation and higher priority placed on making sure that these ICT resources are evenly distributed among the states in the federation than in the state owned institutions where ICT resources are provided by the state government where the polytechnic is situated.

Material resource challenges facing Office Technology and Management (OTM) programme in polytechnics

The findings revealed that implementers agreed that several material resource challenges are facing OTM programme in polytechnics in South-East, Nigeria. This means that material resource such as modern equipment, computer facilities, maintenance of material resources are lagging in OTM programme in polytechnics. This therefore calls for the need of these resources to be adequately catered for. This finding supports that of Tetty (2016) that most community secondary schools in Rombo District suffered shortage of essential teaching and learning materials such as inadequate supply of office equipment, insufficient provision of white boards in the classrooms, low maintenance culture of materials. This finding also supported the finding of Chonjo (2014) that performance could be attributed to adequate teaching and learning materials and equipment that are in school. In order words, the findings could be interpreted to mean that most primary schools that possess adequate teaching and learning materials such as textbooks, charts, pictures, real objects for students to see, stand a better chance of performing well in examination. Based on these findings, it is noteworthy that teaching and learning process at different cadre faces dearth of materials that are required for effective teaching delivery.

Furthermore, the findings revealed that gender did not significantly influence the mean ratings of the implementers on material resource challenges facing OTM programme in polytechnics in South-East, Nigeria. This finding also disagrees with the finding of Tetty (2016) that there is a significant difference in the mean ratings of male and female on the role of material resources in academic performance in community secondary schools in Rombo District, Tanzania. Similarly, this finding was not in line with the finding of Chonjo (2014) that there is a significant difference in the mean ratings of male and female teachers on physical facilities and teaching and learning materials in primary schools in Tanzania. The opposition in both finding could be as a result of change of respondents and geographical location.

More so, the finding revealed that institution ownership did not significantly influence the mean ratings of implementers on material resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria. This finding disagrees with the

finding of Chonjo (2014) that physical facilities and teaching and learning materials in primary schools in Tanzania significantly differ in terms of public and private schools in primary school in Tanzania. One of the major reasons for the variation in the finding could be as a result of change in location.

Human resource challenges faced in the Office Technology and Management (OTM) programme in polytechnics

The finding revealed that implementers agreed that several human resource challenges are facing OTM programme in South-East, Nigeria. This finding implies that manpower challenges such as poor recruitment process, inadequate number of academic staff, lack of motivation, lack of required competencies in the utilization of ICT resources and others still persist in OTM programme in Polytechnics. These challenges therefore call for proper attention on policies for recruitment, leadership skills of staff, skilled ICT personnel, supervisory levels, and proper remuneration of ICT usage. This finding supports that of Chukwuma (2015) that human resources management practices in Innoson Motors were not adequate; staff did not receive training on the job they are doing; the company has not developed a system and process to disseminate knowledge to its local (Nigerian) staff. Moreover, this finding supports the finding of Ologunde and Ajao (2013) that lack of competitive and performance based compensation packages by management and low level of organizational commitment by employees were the prominent challenges encountered in the application of human resource management practices by firms in the agro-allied sector.

Furthermore, this finding revealed that gender significantly influenced the implementers' mean ratings on human resource challenges facing Office Technology and Management programme in polytechnics in South-East, Nigeria. This finding disagrees with that of Okoli and Okeke (2018) that there is no significant difference in the mean ratings of male and female owners of SMEs on the extent they adopt human resource management for business success. The variation of both findings could be as a result of different respondents of both studies. Finally, the finding revealed that institution ownership significantly influenced the mean responses of implementers on human resource challenges facing Office Technology and Management programme in polytechnics in South-East Nigeria. It is the view of the researcher that federal owned institutions seem to employ the best human resources from different parts of the federation to handle the OTM programme in the institutions thereby improving efficiency and effectiveness. Meanwhile, in the state owned institutions, it could be seen that the best human resources are not engaged to handle the OTM programme, as a result of sentiments, parochial interest and favouritism arising from political party loyalty.

Conclusion

Findings of the study showed that Office Management and Technology programme in polytechnics in South-East, Nigeria are faced with several ICT, material and human resource challenges. Based on these findings, it was concluded that the government and other stakeholders are not paying sufficient attention to the programme to enhance the quality of its products.

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Recommendations

Based on the finding and conclusion of the study, the researcher proffers the following recommendations:

1. OTM implementers should enroll for training and retraining programmes, conferences, seminars, workshops and academic programmes in institutions to update and upgrade themselves as well as gain relevant knowledge on human resource practices for effective implementation of the OTM Curriculum.
2. Management of polytechnics in the South-East Nigeria should ensure that qualified OTM staff and skilled ICT technologist are employed; opportunity for further training should be available to programme implementers. Moreover, institutions should ensure that available resources are properly maintained.
3. Government should adequately provide modern ICT resources required to teach OTM courses to enhance teaching and learning. This is critical because the courses are ICT resource–based and cannot be effectively taught without the relevant resources in the right quantity and quality.
4. National Board for Technical Education (NBTE) as the body charged with the responsibility of accrediting and de-accrediting programme of study in the polytechnics should insist on adequate provision of material resources before OTM programme is accredited.

References

Adakole, E. Eiriemiokhale, K.A. & Nnaji, F.O. (2016). Factors affecting availability of instructional materials in the teaching office technology and management in polytechnics in Niger State, Nigeria

Adeola K. L., & Bolarinwa K. O. (2010). Strategies for promoting entrepreneurship education in secondary school curriculum. *Association of Business Educators of Nigeria, Book of readings, 1*(10), 45-55.

Aguba, C.R. (2009). *Educational administration and management - issues and perspectives*. Enugu: Ton and Tons PDS Publishers

Aliyu, M. M. (2013). *Subject method for business teacher*. Kaduna: Sanjo A. J. Global Links Limited.

Amiaya, A. O. (2013). Adequacy of information and communication technology resources for office technology and management programme in Delta State. *International Journal of Education of Education and Research, 1*(11), 1-12.

Amiaya, A.O. (2015). Integrating new technologies into office technology and management curriculum: Challenges and strategies. *Business Education Journal 8*(2), 72-82.

Atueyi, N.C. (2010). Technology in office technology and management. *ABEN Book of Readings 1*(10), 6-10.

Baba, E. I.& Akarahu, C. U. (2012). Adequacy of educational resources for office technology and management programme in polytechnics in Kogi State. *Business Education Journal, 8*(2), 198 – 208.

Chonjo, P. (2014). The quality of education in Tanzanian primary schools –An assessment of physical facilities and teaching learning materials. *UTAFITI (New Series) 1*(1), 1994.

Chukwuma, E.M. (2015). Human resource management challenges in Nigeria under a globalized economy: A Study of Innoson Vehicles Manufacturing Co.

Eneche, J. D. & Audu, O. (2014). *Office administration and management for higher education.* Warri: Kuba Publishing Company.

Etiubon, R.U. & Nwosu, S.N. (2016). Preparing Nigerian school leavers for entrepreneurial development through indigenous science skills. *Journal of Education and Social Policy, 3*(5), 53 – 60.

Federal Republic of Nigeria (2013).*Curricula for Technical Oolleges and Polytechnics*. Kaduna: National Board for Technical Education.

Manabete, S. S., & Makinde, A. A. (2016). Availability and utilization of facilities of electrical installation and maintenance works programme of technical colleges in North-east geo-political zone of Nigeria. *International Journal of Vocational and Technical Education Research, 2*(1), 11-31.

Mmou, A. H.& Olutola, S. U. (2010). Availability of resources for business education programmes as new frontier and paradigm for qualitative education. *Niger Delta Journal of Education (NIDJOE), 3*(1), 1-7.

National Board for Technical Education. (2004). *Office technology and management: curriculum and course specifications*. Retrieved from http:www.unesdoc.unesco.org/images/0016/001614/161448e.pdf.

Nwaokolo, J.O. (2010). Women learners in technical education training: Implication for the attainment of millennium development goals in Nigeria. *Nigeria Vocational Journal, 14*(1), 47-62.

Ogheneovo, A.A. (2013). Adequacy of information and communication technology resources for office technology and management programme in Delta State polytechnics. *International Journal of Education and Research 1*(1), 1-12.

Ogundele, M. O. (2015). Integrating entrepreneurship skills acquisition in to the National Youths Service Corps (NYSC) Programme in Nigeria. *Journal of Entrepreneurship and Management, 7*(3), 24-28.

Okey-Colbert, E. U. (2017). ICT challenges in teaching and learning of office technology and management in Nigeria. *SosPoly Journal of Science and Agriculture, 2*, 1-6.

Ologunde, O. & Ajao, M.G. (2016). The prospects and challenges of human resources management practices adoption in the Agro-Allied industry in Nigeria. *Journal of Management Sciences review 7*

Onyesom, M., & Okolocha, C. C. (2013). Assessment of the adequacy of instructional resources in business education programmes relative to NCCE standards for colleges of education in Nigeria. *Journal of Education and Learning, 2*(2), 1-14. *Retrieved from http://dx.doi.org/10.1108/030682990921172.*

Osuala, E.C. (2009).*Administrative and Office Management in Nigeria*. Enugu: Cheston Agency Publishers.

Owoeye, W. I.&Tara, A. H. (2011). A relationship between current globalization, unemployment, inequality and poverty. *International Journal of Social Economics, 36(1*&2), 37-46. Retrieved from htto://dx.doi.ors/1 0.1 108/03068290910921 172.

Oyedele, J. F. (1992). Facilities for business education for self-reliance. *Business Education Journal, 2*(4), 136-143.

Tetty, J.L. (2016). Role of instructional materials in academic performance in community secondary school in Rombo District. *Dissertation submitted to the Open University of Tanzania.*

Tiamiyu, M. A. (2000). Information technology in Nigerian federal agencies: problems, impact and strategies. *Journal of Information Science, 26*(4), 227-237.*http://jis.sagepub.com/content/26/4/227.*

Ugwuanyi, M. O.& Eze, M. E. (2007). An assessment of the educational resources available for implementing the mandates of secretarial studies programme in Nigerian polytechnics. *Business Education Journal, 6*(2), 198 – 208.

Ugwuanyi, M. O.& Eze, M. E. (2012). Strategies for effective implementation of ICT driven curriculum for secretarial studies programmes in Nigeria Polytechnics. International *Business Administration Journal, 12*(1), 62 – 69.

Ugwuogo, C.C. & Udu, S.C. (2019). Assessment of electronic resource based learning in business education in tertiary institutions in Anambra State, Nigeria. *International Journal of Education and Research 7*(2), 131-144.

Umunadi, K.E. (2009). A relational study of students' academic achievement of television technology in technical colleges in Delta State. *Journal of Industrial Teacher Education 40*(3), 133-131.

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