



STUDENTS CHALLENGES TO THE TEACHING OF ICT-RELATED COURSES IN OFFICE TECHNOLOGY AND MANAGEMENT EDUCATION PROGRAMMES OF COLLEGES OF EDUCATION

Eze, Olufunmilayo

*Department Of Business Education
Federal College of Education, Katsina,
Katsina State, Nigeria
igwekingsleyogazi@gmail.com*

Mrs. Chima-Uduma, Comfort E.

*Department Of Business Education
Ebonyi State College of Education, Ikwo,
Ebonyi State, Nigeria*

Igwe Kingsley Ogazi (Ph.D)

*Department of Human Resources Management
Nigeria Postal Service (NIPOST), Abakaliki, Ebonyi State*

ABSTRACT

The study focused on the students' challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education in Katsina and Kano States. One research questions and one null hypothesis guided the study. The design of the study was a survey design. The population of the study comprised of one hundred and seventy-seven (177) lecturers in Business Education Department in the Colleges of Education in Katsina and Kano States. There was no sampling. A structured questionnaire, validated by two experts in Business Education and one expert in Science Education Departments, Ebonyi State University, Abakaliki was used for the study. Using Cronbach alpha statistics, the instrument yielded a reliability coefficient of 0.95. One hundred and seventy-seven copies of the questionnaire were accurately completed and returned. Mean and standard deviation were used to answer the research questions while t-test was used to test the hypotheses. The results of the study showed that: lack of interest in learning spreadsheet skills, lack of Interest in ICT related courses, poor students/facilities ratio, nonchalant attitude during classes, lack of interest in Data base management training and lack of skills in MS Access are the students related challenges to the teaching of ICT related courses in Office Education programme of Colleges of Education in Katsina and Kano states. It was also found that there is a significant difference in the opinion of lecturers on student-related challenges to the teaching of ICT-related courses in Office Education programmes of Colleges of Education based on location in Katsina and Kano States. It was recommended among others that Students should be encouraged to possess and utilize ICT teaching instructional technologies during teaching and learning processes.

Keywords: *Students, Challenges, Teaching, Information and Communication Technology Office Technology Management*

Introduction

Information and Communication Technology (ICT) is an umbrella term that includes all technologies encompassing medium for recording information such as magnetic disk, tape, optical disks (CD/DVD) flash and paper record, technology for the broadcasting, information, radio, television and technology for communicating through voice and sound or image, microphone, camera, loudspeaker, telephone or cellular phones (Augustine and Akpan, 2021). It also includes a wide variety of computing hardware, desktop computers, laptops and storage devices. From the foregoing, one can define ICTs as electronic devices that encompass CD-ROM, computer hardware and software, Internet, radio, television, disk and tape that libraries and information centers manipulate to facilitate recording, organizing, storage, retrieval, transmission and dissemination of information. The advent of ICT has broadened the horizon of education including Office Technology and Management as a result of increase in information. Information in various fields is readily available at split seconds. ICT has led to a fast paced world in almost all spheres of human endeavors. The rate at which the world is moving with Information and Communication Technology in this 21st century has left no choice to the educational sector especially in the area of



teaching and learning than to dance to the tune piped by recent technological trends (Augustine and Akpan, 2021).

Office Education/Office Technology and Management (OTM) programme consists of courses that provide the business world with multi-skilled and knowledgeable workers who manage information efficiently, equipped with a comprehensive range of skills including managerial, technological and communication skills. Its graduates find employment in variety of fields in the business world. The work involves the management of information in administrative, financial, public relations, human resources, legal, e-commerce, event management or education and training environment. OTM programme was designed to equip students with secretarial/office skills for employment in various fields of endeavour. The goals and objectives of OTM, according to the National Board for Technical Education (NBTE, 2004), are to: equip the students with the knowledge, competencies and specific skills that will enable them to successfully hold position as secretaries, managers and administrative assistants in both public and private sectors of the economy; expose student to industrial experience thereby affording them the opportunity to practicalize their skills; develop the student's potentials for further academic and professional pursuit; develop in the students an occupational intelligence that will make them versatile and adaptable to the changing situation in the world of work.

The current office education programme lays much emphasis on computer and computer related courses. Ojukwu, (2018) observed that ICT related courses in the OTM curriculum include; ICT office applications I and II, Database Management System, Management Information Systems, Advanced Web Page Design, Advance Desktop Publishing, and Modern Office Technology. Thus, there is now more emphasis on ICT related courses. Some Colleges of Education as noted by Ojukwu (2018), have indicated that there are not enough human resources to competently teach especially the ICT and related new courses especially in OTM Education programme. In the case of ICT office applications, I and II, it was stated that lecturers who would teach the course should be well knowledgeable in computer and its applications. Ojukwu, (2018) observed that Office Technology and Management Education teachers need to teach in line with the global demand and trends; and they should be dynamic to innovations in the education system. This would enable Office Technology and Management courses to achieve the objectives for which they are established. The modern Office Technology and Management Education teacher should be one who can source information locally and globally as the entire world has been a global village. Materials acquired in one environment should be used to solve problems in another environment.

In contrast to the past, OTM education was referred to as secretarial education and its origin dates back to the Greek age when clay was used in technology. During those years, secretarial education was crude, and in schools and offices, the basic instruments used in learning and practicing the profession were locally made and manually operated. Hence, correspondences in the office were basically done in handwriting; and copy clerks were specially employed and trained for such handwriting jobs. However, the advent of the typewriter in the 18th century became a turning point for the enhancement of the study and practice of secretarial education which is known today as OTM education (Isiyaku, 2017).

As a course formerly referred to as Secretarial Education, Ojukwu (2018) noted that in Nigeria and in the early 1970s the demand for Secretaries and for Secretarial Education became obvious. Then secretarial candidates were sent abroad for training. However, by the 1980s many tertiary institutions started offering the course, and University of Nigeria Nsukka was the first university in West Africa to offer the course, followed by ABU (Ojukwu, 2018). Presently, many tertiary institutions/universities offer the course in Nigeria, and from the use of handwriting and the use of manual typewriters, secretarial education has become the turning point for the use and application of computers and information technologies across the globe.

Across the globe, OTM education has evolved as a branch of business education especially with the coming of ICTs into the education system. Its scope now includes a wider horizon of clusters of business and technological expositions to support the growth and development of individuals and nations. Extant literature has shown that one of the most immediately visible trends in OTM education across the globe is the continuous adjustment of the scope of its programs with the aim of tackling issues of global responsibility and sustainability- the most common response being the inclusion of new ICT modules in its existing programmes (Tilbury and Ryan, 2021). Mountjoy (2017) recognized significant changes in the scope of business education (OTM education inclusive) in America, which were triggered by scientific modernizations and changes in general attitudes of people towards business/vocational education. Already, the scope of OTM education program has changed dramatically across the globe, in practice and theory and its curricular content has shifted focus from teaching typewriting, shorthand, and machine transcription



to teaching ICT-related courses (Mountjoy, 2017; Isiyaku and Fidelia, 2020).

Unfortunately, despite the changes in the OTM education across the globe and in Nigerian tertiary institutions, OTM education still remains traditional and crude in nature; with obsolete technologies still in use (Asogwa, 2019; Isiyaku, Ayub and Kadir, 2018; Isiyaku, 2020). However, at the dawn of Nigeria's conception of the vision 2020 objectives, there were high expectations that special attention would be given to education at all levels, especially skill-oriented education such as OTM education. Unfortunately, over the past several years Nigeria has not accorded adequate attention to the upliftment of the standards of its education system, especially with regard to Office Technology and Management Education. Currently, the global economy has shifted from its primitive structure to a technology-driven economy, thereby changing the outlook of jobs and skills dramatically and supporting the integration of ICTs into most spheres of life (Edokpolor, Akpan, and Udom, 2017). Most jobs now require people who have competence in ICT skills. This implies that if Nigeria wants to join the league of advanced economies, it must comply with global standards. Hence, in 2007, the Federal Government of Nigeria recognized the important role of the above competence and took the lead to integrate information technologies into OTM education programme. Unfortunately, government failure to provide adequate facilities for the implementation of such technologies in the classroom has left the situation unchanged. Hence, computers and other relevant facilities needed for the effective teaching and practice of OTM education in Nigeria's tertiary institutions have remained grossly inadequate with government continually failing to provide enough money needed for the anticipated reform in Nigeria's education (Edokpolor et al, 2017). But for an optimal teaching experience of ICT-related courses in OTM education programme, it is crucial to shift from the obsolete traditional designs and teacher-centered content delivery approach to a new model that supports the adoption of new technologies in teaching (Isiyaku, Ayub and Kadir, 2018). In doing this will entail securing solid ICT baseline, but it is unfortunate that teaching ICT-related courses in OTM education programmes in Nigerian tertiary institution seems to be faced with several challenges including lack of adequate ICT infrastructure over the years, to effectively implement ICT-compliant teaching. These challenges according to Isiyaku (2020) could be school facilities related, human resource related, students related and/ or school administration related. Lack of power is empirically a challenge to the use of ICT facilities. In Nigeria tertiary institutions, there are so many factors that hinder the effective utilization of ICT in education. These factors have been grouped into the following categories. Ilaonisi and Osuagwu (2020) indicated that many factors limit the infusion of ICT in educational institutions in Nigeria. These include paucity of ICT infrastructure and lack of access; high enrolments, inadequate funding and absence of funding allocation to technology; high cost of ownership and cost to the consumer and policy implications of the mismatch between the advertised capabilities of ICT technology and the aims of individual educational institutions. One of the greatest challenges in ICT use in education is balancing educational goals with economic realities.

Students' as well as lecturers related challenges seem to have bedeviled the teaching of ICT-related courses in Office Technology and Management Education in Nigeria. The effective utilization of ICT facilities depends largely on the students' capacity to use the ICT facilities to aid in teaching and learning. The application of ICT facilities in the educational institutions depends largely on the numbers of ICT instructors and students the schools are having at a particular time. Inadequate ICT manpower in educational institutions seems to be affecting the effective utilization of ICT facilities in teaching and learning in OTM Education programme. Studies show that students have lower competences on basic computer and internet application, which is very basic in distance learning process. It appears that students are not competent in using word processing, writing email, sending documents as attachments and on database and PowerPoint presentation. Students require adequate knowledge on the usage of Web browser, Spreadsheet, On-line bibliographic database, Database, Image program, Chat program, Presentation manager, among others. The use of ICT requires some skills to be able students to retrieve the required information without much stress. The level of ICT skills a student possesses may affect use of ICT and some studies have been carried out to investigate the influence skill has on ICT use. Mutula (2020) reported that fresh students who got admission into the colleges are largely information illiterate and this creates challenges to the college in terms of offering effective academic programmes. Mutula (2020) who reported that fresh students who got admission into the colleges were largely information illiterate and this created challenges to the college in terms of offering effective academic programmes. The use of ICT requires some skills to be able students to retrieve the required information without much stress. The level of ICT skills a student possesses may affect use of ICT and some studies have been carried out to investigate the influence skill has on ICT use.

Furthermore, it is interesting to note that, the location of the institutions may influence the teaching of ICT-related courses in OTM programme in colleges of education. Otum and Atah (2021) defined location



as a particular position, situation or geographical area. By school location therefore, it means urban-rural school settings and this classification has influenced educational development (Abidogun, 2021). Otum and Atah (2021), explained that environment in which an employee works influences his level of utilization of emerging technologies considering the internet connectivity and level of socio-economic development of such location/ area. This area may be urban or rural area where the inst is institutions is located. Location of institutions has a role to play on the challenges to the teaching of ICT-related courses in OTM programmes in colleges of education. Emele (2018) emphasized that students in the rural areas have difficulty in the use of computer software and applications due to poor power supply and network connectivity. Otum and Atah (2021) who explained that environment in which an employee works influences his level of utilization of emerging technologies considering the internet connectivity and level of socio-economic development of such location/ area. This area may be urban or rural area where the university is located. Location of a university has a role to play on the challenges to the teaching of ICT-related courses in OTM programmes in colleges of education.

The teaching of OTM programme seems to be faced with myriads of problems bothering on non-availability of new technologies which makes it difficult to teach ICT-related courses and prepare students for the use of the technology in various fields of human endeavour. Despite the critical role of information communication tools in sectors like banking, construction, transport and communication among others, it has not been fully adopted in the teaching process in Colleges of Education in Nigeria especially in Katsina and Kano States. Most of the Colleges still use obsolete systems and consequently are unable to exploit educational potentials of the emerging technologies. Moreso, the use of Information and Communication Technology in education is limited by poor ICT infrastructure, weak policy and regulating framework, limited number of teachers who are ICT proficient, low telecommunication services penetration and lack of basic ICT skills by students and poor funding. Basically, the apparent lack of adequate classroom facilities and laboratory equipment like computers and poor Internet access, as well as other basic ICT equipment needed for effective teaching functions have grossly incapacitated the teaching of ICT-related courses in Office Technology and Management Programmes in Colleges of Education. It is very worrisome to this researcher that if the trend is allowed to continue, technological development of the country in terms of ICT compliance in teaching OTM courses will be jeopardized. The problem of this study therefore is to examine the student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education in Katsina and Kano States.

Research Questions

The following research questions shall guide the study:

1. What are the student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education in Katsina and Kano States?

Hypotheses

The following hypotheses were tested at 0.05 alpha level:

H₀: There is no significant difference in the mean ratings of lecturers on student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education in Katsina and Kano States based on location

Method

The design adopted for this study is a descriptive survey design. The study was conducted in Katsina and Kano States. The population for this study is one hundred and seventy-seven (177) lecturers in Business Education Department in the Colleges of Education in Katsina and Kano States as at 2021/2022 academic year. The sample of the study is 177. Owing to the fact that the population is not too large, the entire population was used as the sample for the study. Therefore, there was no sampling. The instrument used for data collection for this study was a structured questionnaire designed by the researcher titled; Challenges to the Teaching of ICT-Related Courses in Office Technology and Management Programmes Questionnaire (CTICT-RCOTMPQ). The instrument was subjected to validation by three experts (two ICT experts in Business Education and one expert in Measurement and Evaluation), all from Ebonyi State University, Abakaliki. The instrument was subjected to test of internal consistency, the entire 20 items of the instrument yielded a reliability index of 0.95, which showed a very high internal consistency. One hundred and seventy-seven (177) copies of the questionnaire were administered to the respondents by five trained research assistants and supervised by the researcher. Mean and standard deviation were used to analyze data related to the research questions. The hypotheses were tested using t-test statistic at 0.05 level of significance. A null hypothesis was accepted when the t-critical is greater than the t-calculated. The null hypotheses was not accepted when the t-critical is greater than the t-calculated.



Results

Research Question 1: What are the Student-Related Challenges to the Teaching of ICT-Related Courses in OTM Programmes?

Data collected with items 1 to 10 of the instrument were used to answer this research question. Summary of results is presented on Table 1 below.

Table 1: Mean Responses on Student-Related Challenges to the Teaching of ICT-Related Courses in OTM Programmes.

| S/N | Student-related challenges | SA | A | D | SD | X | SD | Decision |
|-----|---|-----|----|----|----|-------------|-------------|----------|
| 1 | Lack of interest in learning word processing skills | 51 | 20 | 25 | 81 | 2.32 | 1.29 | NA |
| 2 | Lack of interest in learning word presentation skills | 24 | 50 | 11 | 92 | 2.03 | 1.62 | NA |
| 3 | Lack of interest in learning spreadsheet skills | 83 | 35 | 26 | 33 | 2.94 | 1.69 | A |
| 4 | Lack of Interest in ICT related courses | 64 | 40 | 23 | 50 | 2.66 | 1.23 | A |
| 5 | Poor students / facilities ratio | 114 | 25 | 17 | 21 | 3.31 | 1.06 | A |
| 6 | Nonchalant attitude during classes | 101 | 34 | 26 | 16 | 3.24 | 1.01 | A |
| 7 | Lack of interest in Data base management training | 78 | 12 | 32 | 55 | 2.63 | 1.32 | A |
| 8 | Lack of interest in virtual classrooms | 59 | 16 | 42 | 60 | 2.41 | 1.26 | NA |
| 9 | Lack of skills in surfing the internet | 49 | 10 | 24 | 96 | 2.04 | 1.29 | NA |
| 10 | Lack of skills in MS Access | 87 | 32 | 24 | 34 | 2.97 | 1.18 | A |
| | Grand Mean | | | | | 2.65 | 1.29 | A |

Result in the Table 1 show that show that lack of interest in learning spreadsheet skills, lack of Interest in ICT related courses, poor students/facilities ratio, nonchalant attitude during classes, lack of interest in data base management training and lack of skills in MS Access are the student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education with the mean rating between 2.94 to 3.31 which is above limiting value of 2.50 while the respondents revealed that lack of interest in learning word processing skills lack of interest in learning word presentation skills lack of interest in virtual classrooms lack of skills in surfing the internet are not a challenge with mean ratings of 2.03 and 2.41 are below the limiting value of 2.50. The grand mean of 2.65 implies that the respondents accepted all the items as the student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education in Katsina and Kano States

Hypothesis

HO₁: There is no significant difference in the mean ratings of lecturers on student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education in Katsina and Kano States based on location.

Data collected on school administration-related challenges were separated across ownership of the institutions and subjected to a t-test analysis. Summary of the data analysis is presented on Table 10.

Data collected on student-related challenges were separated across location and subjected to a t-test analysis. Summary of the data analysis is presented on Table 2.



Table 2: T-test Result on Student-Related Challenges to the Teaching of ICT-Related Courses in OTM Programmes of Colleges of Education Based on Location.

| Items | Location | N | Mean | SD | DF | t.Cal | t.crit | Decision |
|-------|----------|-----|------|------|-----|-------------|-------------|--------------------|
| 1 | Urban | 36 | 1.00 | 0.00 | 175 | 7.27 | 1.96 | Significant |
| | Rural | 141 | 2.54 | 1.27 | | | | |
| 2 | Urban | 36 | 1.22 | 0.54 | 175 | 5.00 | 1.96 | Significant |
| | Rural | 141 | 2.24 | 1.18 | | | | |
| 3 | Urban | 36 | 2.94 | 1.14 | 175 | 0.03 | 1.96 | Not Significant |
| | Rural | 141 | 2.95 | 1.17 | | | | |
| 4 | Urban | 36 | 3.36 | 0.93 | 175 | 3.94 | 1.96 | Significant |
| | Rural | 141 | 2.48 | 1.24 | | | | |
| 5 | Urban | 36 | 3.00 | 1.17 | 175 | 1.99 | 1.96 | Significant |
| | Rural | 141 | 3.39 | 1.02 | | | | |
| 6 | Urban | 36 | 3.00 | 1.17 | 175 | 1.62 | 1.96 | Not Significant |
| | Rural | 141 | 3.30 | 0.96 | | | | |
| 7 | Urban | 36 | 3.00 | 1.17 | 175 | 1.85 | 1.96 | Not Significant |
| | Rural | 141 | 2.54 | 1.34 | | | | |
| 8 | Urban | 36 | 1.86 | 1.04 | 175 | 3.03 | 1.96 | Significant |
| | Rural | 141 | 2.56 | 1.27 | | | | |
| 9 | Urban | 36 | 1.00 | 0.00 | 175 | 5.95 | 1.96 | Significant |
| | Rural | 141 | 2.31 | 1.32 | | | | |
| 10 | Urban | 36 | 3.38 | 0.96 | 175 | 2.40 | 1.96 | Significant |
| | Rural | 141 | 2.86 | 1.21 | | | | |
| | | | | | | 3.28 | 1.96 | Significant |

The result in Table 2 shows that with 175 degrees of freedom and at 0.05 level of significance, t-calculated of (3.28) is greater than the t.crit value of 1.96 ($3.28 > 1.96$). Hence the null hypothesis is rejected. Summary of the results presented on Table 8 indicates that there is a significant difference in the opinion of lecturers on student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education based on location. The researcher based on data analyzed above concluded that there is a significant difference in the opinion of lecturers on student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education based on location in Katsina and Kano States.

Discussion

The findings of this study indicated that lack of interest in learning spreadsheet skills, lack of interest in ICT related courses, poor students/facilities ratio, nonchalant attitude during classes, lack of interest in Data base management training and lack of skills in MS Access are the students related challenges to the teaching of ICT related courses in OTM programme of Colleges of Education in Katsina and Kano states. These findings agreed with the views of Mutula (2020) who reported that fresh students who got admission into the colleges were largely information illiterate and this created challenges to the college in terms of offering effective academic programmes. The use of ICT requires some skills to be able students to retrieve the required information without much stress. The level of ICT skills a student possesses may affect use of ICT and some studies have been carried out to investigate the influence skill has on ICT use.

However, the findings on the hypothesis tested showed that there is a significant difference in the opinion of lecturers on student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education based on location. The finding is in consonance with the view of Otum and Atah (2021) who explained that environment in which an employee works influences his level of



utilization of emerging technologies considering the internet connectivity and level of socio-economic development of such location/ area. This area may be urban or rural area where the university is located. Location of a university has a role to play on the challenges to the teaching of ICT-related courses in OTM programmes in colleges of education. Also, Emele (2018) emphasized that lecturers in the rural areas have difficulty in the use of computer software and applications due to poor power supply and network connectivity.

Conclusion

Based on findings of this study, it was concluded that lack of interest in learning spreadsheet skills, lack of interest in ICT related courses, poor students/facilities ratio, nonchalant attitude during classes, lack of interest in Data base management training and lack of skills in MS Access are the students related challenges to the teaching of ICT related courses in OTM programme of Colleges of Education in Katsina and Kano states and there is a significant difference in the opinion of lecturers on student-related challenges to the teaching of ICT-related courses in OTM programmes of Colleges of Education based on location.

Recommendations

Based on the findings, the following recommendations were made:

1. Management in colleges of Education should provide adequate ICT teaching facilities for effective implementation of OTM programmes.
2. Students should be encouraged to possess and utilize ICT teaching instructional technologies during teaching and learning processes.

References

- Abidogun, P. K. (2021). Availability, use of information and communication technology and the ICT literacy skills of undergraduates in seven Nigerian universities. *Nigeria Journal of Business Education for Teacher Education*, 2(1), 221-230
- Asogwa, U. L. (2019). The Impact of Office Automation on Secretarial Practice. *Journal of Office Management and Technology*. 1(1), 160-166. paper presented at National Summit on Education on Repositioning Nigeria Educational system for the achievement of the National 20-20-20 vision. Abuja
- Augustine, N & Akpan, C. I. (2021). Measures for effective implementation of office technology and management programme in Tertiary Educational Institutions in Nigeria, *Journal for the advancement of Office Technology and Management* 5 (1), 12-25.
- Edokpolor, S. Akpan, W. & Udom, F. (2017). Determinants of instructors' educational ICT use in Ethiopian higher education, *Journal of Education and Information Technologies*, 34(15), 273 – 286.
- Emele, N.I. (2018). Application of new technologies and mentoring strategies in business education among business educators in tertiary institutions in cross river state, nigeria. *international journal of social sciences (ijss)*. 2(1), 137-149
- Ilaonisi, K. O. & Osuagwu, C. A. (2020). Infusing creativity and technology in 21st century education: A systemic view for change. *Educational Technology? and Society*, 19(3), 27-37.
- Isiyaku, D. D. & Fidelia, F. (2020). NBTE new curriculum in office technology and management (OTM) for ND/HND Accounting: Observations and comments. *Business Education Journal*, 6 (1), 31 -36.
- Isiyaku, D. D (2017). issues and challenges in the use of information communication technology (icts) in education, *Journal of Information and Knowledge Management* 2(1), 1-17.
- Isiyaku, D.D. (2020). Evolutions in office education programs in Nigerian tertiary institutions within the parameters of Nigeria's vision 20:2020 objectives. -*Bichi Journal of Business Education (BIJOBE)*, 4(1), 1-16
- Isiyaku, D. D. Ayub, H. & Kadir, F. (2018). Challenges and opportunities for e-learning in education: a case study," in *Educational Technology Integration and Active Learning*, pp. 317-328, IGI Global, Hershey, PA, USA
- Mountjoy, A. (2017). Opportunities and challenges for integrating ICTs in education delivery in the Institute of Continuing Education at the Open University of Tanzania. *Journal of Public Administration and Policy Research*, 3(9), 237-242
- Mutula (2020)
- National Board for Technical Education (NBTE, 2004). New curriculum in office technology and management (OTM) for ND/HND Accounting: Observations and comments
- Ojukwu, K. (2018). A review of literature on empowerment of office technology and management teachers of Nigerian Polytechnics. *Business Education Journal*, 7(1), 3-8
- Otum, N.I. & Atah, C. A. (2021). Perceived strategies for teaching business education curriculum content for the acquisition of skills competence. *International Journal of Education and Evaluation* (5). 12-20. Retrieved from: www.iiardpub.org Tilbury and Ryan, 2021).