LEVEL OF DIGITAL RESOURCES UTILIZATION IN OFFICE TECHNOLOGY AND MANEGEMENT PROGRAMME IN PUBIC POLYTHENICS IN ANAMBRA AND IMO STATE

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Abstract

The need to improve the teaching of OTM courses for students' skill acquisition necessitated this study. The study examines the level of digital resource utilization for effective instructional delivery of OTM courses towards students' acquisition of employability skills for self-reliance. One research question and two null hypotheses guided the study. The study adopted survey research design with a population 65 OTM lecturers in public polytechnics in Anambra and Imo Sates studied without sampling. Structured questionnaire containing 21 items were used for data collection. Face and content validity of the instrument was ascertained using three experts in the field of OTM and Measurement and Evaluation. The reliability of the instrument was established using pilot-test and data calculated with Cronbach Alpha yielded correlation coefficient of .91. The researcher with the help of two research assistants adequately briefed administered the instrument to the respondents. Mean, standard deviation and t-test were used for data analysis. Findings revealed that OTM lecturers lowly utilize digital resources for instructional delivery of OTM courses towards enhancing students' acquisition of employability skills. It was also found that age and years of teaching experience were not significant factors on the extent OTM lecturers utilize digital resources for instructional delivery of OTM courses. Based on the findings of the study, the researcher concluded that OTM lecturers in polytechnics in Anambra and Imo States are not utilizing digital resources to the fullest extent possible to give their students the employability skills they need for self-reliance. It was recommended among others that; management of polytechnics should encourage all OTM lecturers in the study area who lack digital literacy to pursue training in order to improve their ability to deliver high-quality instruction.

Key Words: Digital Resources, Utilization, Instructional Delivery, Office Technology and Management

Introduction

New skills are learned in several ways. But, the most practical ways to learn new skills are through educational institutions, informal home learning, and on-the-job apprenticeship. Based on these possibilities, attending educational institutions is considered to be the most popular way to learn applicable skills. This is due to the fact that in addition to obtaining the necessary knowledge, other types of knowledge pertaining to the in question skills will also be gained. Even so, not all educational institutions are able to provide functional and specialized skills. Because of this, Nigeria has a variety of educational institutions, such as universities, technical colleges, colleges of education, innovation enterprise institutions and polytechnics.

The polytechnic is one component of Nigerian post-secondary institutions that is primarily geared to train and prepare students for the industry. In addition to the general goals of higher education in No.59, the education policy document of the Federal Republic of Nigeria (FRN, 2013) states in No. 80 that polytechnics shall: provide full-time or part-time courses of instruction and training in engineering, other technologies, applied science, business and management, leading to the production of trained manpower, provide technical knowledge and skills necessary for agricultural, industrial, commercial, and economic development of Nigeria, and impart the required knowledge and abilities to produce technicians, technologists, and other skilled workers who will, among other qualities, be entrepreneurial and

independent. One of the educational programmes offered by polytechnics in Nigeria is the Office Technology and Management (OTM).

Office Technology and Management was included to Nigerian Polytechnics to help students build their skills and competencies (FRN, 2013). It is a major component of business education and it is offered as a programme of study at the National Diploma (ND) and Higher National Diploma (HND) in the polytechnic level. According to the National Board of Technical Education (NBTE, 2009) OTM programme prepares students for effective work competencies, psychological and practical skills, knowledge of occupations in various economic sectors, and social life for effective work performance in employment and self-reliance. Similar to this, the majority of the courses in the OTM curriculum place a strong emphasis on developing digital skills, which are crucial in today's technology-driven workplaces (NBTE, 2009). Goals of OTM programme is to prepare contemporary secretaries to become proficient in workplace. In addition, OTM graduates are expected to be employable, with the ability to start up small businesses like photocopying, computer and internet centers, laptop and phone repair centers, computer and phone accessory sales, provision stores, book binding centers, reprographic, printing press, and rental services, among others, in order to hire workers.

Digital resources are becoming an increasingly essential aspect of general literature. The term "digital resources" refer to resources that need computer access or any electronic product that offers a collection of data, such as full-text databases, electronic journals, image collections, and other multimedia and media-based goods (Dukare, 2020). Digital resources are materials planned and developed digitally, or transformed from analog to digital format. They are items that necessitate computer access via a personal computer or a mobile device (International Federation of Library Associations and Institutions, IFLA, 2012). Digital resources can be accessed physically or remotely via the internet.

Digital resources come in a variety of forms, such as electronic journals, databases, books, newspapers, and archives (Sivakami & Rajendran, 2019). Additionally, digital resources can be found online databases in a variety of digital formats, CD-ROMs, e-mails, Adobe Acrobat documents, Webpages, e-magazines, e-serials, e-dissertations and theses, World Wide Web (WWW), online Public access catalogues, reference databases, e-images, and e-audio visual resources (Onuoha, Ifeanyi & Yunisa, 2020). Furthermore, IFLA (2012) enumerated types of digital resources as e-journals, e-books, full-text (aggregated) databases, indexing and abstracting databases, reference databases (biographies, dictionaries, directories, encyclopedias), numerical and statistical databases, e-images, and e-audio/visual resources. Similarly, (Olatunde-Aiyedun, Eyiolorunse-Aiyedun and Ogunode (2021) enumerated types of digital resources as internet facilities/network connectivity, ICT resource centers, school cyber café, multimedia classrooms (audio-visual centers), digital library, satellite dish for global information, Close Circuit Television (CCTV), and Examination Scoring Machine (ESM). The IFLA (2012) posited that these online tools or resources can be used to enhance the efficacy, efficiency, and standard of instructional delivery.

Utilization refers to using the resources that are at one's disposal. Ogbu (2016) defined it as the process of using purchased and readily available technologies, parts, tools, and appliances to improve the ease, interest, and benefits of teaching OTM courses. Utilization of digital resources in the context of this study refers to the practical and efficient use of offered digital materials for OTM lecturers' teaching in institutions polytechnics. Digital resources serve more as instruments for conducting research and teaching. It involves fast scanning a large number of materials. Notably, lecturers in Nigeria's higher education institutions, including polytechnics, now rely heavily on digital resources as a source of information. Prior to the development of digital resources, the primary information source in higher education was the production of pen, paper and print materials (Livina & Mole, 2021). However, in this modern age, the use of digital resources in higher education is gradually displacing the use of print materials. Similar to this, the Corona Virus (COVID-19) pandemic outbreak has increased the value of

digital resources in higher education institutions globally. The focus of online classrooms is shifting from teacher-centered to learner-centered, with little face-to-face interactions between lecturers and students. In agreement, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2020) noted that COVID-19 pandemic has led to a sharp decline in in-person instruction in tertiary institutions around the world. Messina and Garca (2020) claimed that the suspension or reduction of face-to-face classes at tertiary education level have raised the desire for lecturers in developing countries (especially Nigeria) to utilize digital resources in their instructional delivery. Furthermore, the COVId-19 pandemic has sparked the creation of brand-new, cost free online sources that lecturers may easily access and use to meet informative demands. According to Onuoha, Ifeanyi and Yunisa (2020), the use of digital resources is currently drastically altering how information is accessed and retrieved in tertiary institutions. The fact that digital resources are updated often, contain up-to-date information, and have sophisticated search options that make information accessible from anywhere at any time is only one of the numerous benefits they have over traditional print-based resources such as books, journals, and magazines.

OTM lecturers have immediate access to digital resources in their offices, ICT laboratories, school libraries, and off-campus locations. In addition, OTM lecturers in Nigerian polytechnics can prepare classes and assignments using digital resources to upgrade their knowledge. Digital resources can also be used to support course materials, prepare conference papers, write theses and dissertation, and review other research reports. They can also be updated with new information to enhance instructional delivery practices. However, Odili, Adetona and Eneh (2020) found that few of the institutions' digital resources in Nigeria are current and that most higher learning institutions in Nigeria lack updated e-libraries with enough digital resources. According to Odili et al., the majority of Nigeria's tertiary institutions' libraries still include roughly 70% hardcover volumes. The authors asserted that these difficulties prevent lecturers (OTM lecturers inclusive) from effectively utilizing digital resources for their teaching and research. Similar to this, Ansari (2020) stated that network challenges and inadequate connection have an impact on how well tertiary institutions in developing nations download and use digital resources (Nigeria inclusive). It is important to keep in mind that the use of digital resources depends on the OTM lecturers' level of ICT competencies.

OTM lecturers are male and female who impact necessary skills to students in polytechnics. The utilization of digital resources for effective teaching of OTM course could be influenced by age of lecturers. Younger OTM lecturers (18-40 years old), also known as digital immigrants, may be more willing and motivated to use these digital resources for their instructional delivery than older/immigrants/veterans (41 and above years) who may want to maintain the status quo of using hardcover text books for teaching and research purposes. One of the challenges to the utilization of digital resources in business education programmes (OTM programme inclusive), according to Nwachujwu and Eneh (2018), who made similar finding, was the reluctance of many older business education lecturers to utilize digital resources in their teaching methods. However, Keržič, Danko, Zorko and Dečman (2021) observed that despite certain age-related disparities occur in lecturers' personal ICT usage, age was not a determinant in instructional ICT use. These different findings show that the relationship between age and lecturers' use of digital resources in instructional delivery still remain inconclusive. One can see that some point to age differences while others do not. Similarly, years of teaching experience of OTM polytechnic lecturers could be an influencing factor on their utilization of digital resources in this regard. OTM lecturers with more than six years of teaching experience (6 years and more) may utilize digital resources differently more than those with one to five (1-5 years) experience. It may be because, they have attended more in-service training programmes such as conferences, workshops and seminars on how to effectively utilize these digital resources in delivering instruction, or may be because, their in-service training have been different. Amuzu (2018)

reported that lecturers' years of experience affected how they utilize ICT resources to deliver training, which is evidence to back up this assertion.

The delivery of instruction in polytechnics has been swept up in the current wind of change brought on by the development of digital resources. A wide variety of digital resources are available to OTM lecturers. The level of use of digital resources has a significant impact on the effectiveness of instruction in OTM polytechnics. Therefore, it is crucial to investigate digital resource factors for effective instructional delivery of OTM courses towards students' acquisition of employability skills for self-reliance in polytechnics in Anambra and Imo states.

Statement of the Problem

In the past, utilizing materials in physical copies as the primary information sources dominated teaching in institutions of higher learning. However, new developments in digital resources have altered how information is accessible and utilized in institutions of higher learning. Similar to this, the Covid-19 pandemic epidemic has increased the need for digital resources to be employed in raising the caliber of instruction and research in Nigeria's higher education. Digital resources are heavily utilized by lecturers in developed nations like USA, China, UK, and Germany among others to update knowledge, prepare lessons and assignments, and support course materials. Therefore, it is envisaged that OTM lecturers in Nigerian polytechnics will utilize a variety of digital resources for instruction, despite the abundance of free digital resources available for teaching, the level of adoption of many of these tools by OTM lecturers in Nigeria's higher education is still subpar.

.However, Nwokocha and Onwuchekwa (2014) observed that despite the enthusiasm towards the use of digital resources and huge investment in the acquisition of these ICT tools, the use of digital resources seems to have little impact in the classroom because some OTM lecturers are showing signs of apathy towards digital resource technologies. Similarly, Okoli and Wagbana (2016) observed that most OTM lecturers lack the knowledge and skills in the use of digital resources and in addition, most OTM lecturers are not enthusiastic about the changes due to Inadequate training to meet up with rapid technological flux.

The researcher is concerned that OTM lecturers' underuse of digital resources may have an impact on the caliber of their instruction, and impede their professional practices. Similar to this, the scenario may make it difficult for students of OTM programme in polytechnics to acquire a comprehensive knowledge base and specialized skills upon graduation, which may limit their capacity to compete with graduates from other geographical regions of Nigeria, and other nations in the world.

Hence this study is to identify the level of utilization of digital resource technology by OTM lecturers in public polytechnics in Anambra and Imo State.

Purpose of the Study

This study specifically examines (1) level of utilization of digital resource technology in OTM programme. in public polytechnics in Anambra and Imo State (2) Constraints to effective utilization of digital resources or instructional delivery of OTM courses towards students' acquisition of employability skills. in public polytechnics in Anambra and Imo State.

Research Question

The following research question guided the study;

1. What is the level of digital resources utilization in OTM programme?

Research Hypotheses

1. There is no significant difference in the mean ratings of OTM lecturers on the level of digital resources utilization OTM programme based on age.
2. There is no significant difference in the mean ratings of OTM lecturers on the level of digital resources utilization OTM programme based on years of teaching experience.

Method

This study adopted survey research design. It was conducted in public Polytechnics in Anambra and Imo States. The population of this study comprised of 65 OTM lecturers in public polytechnics in Anambra and Imo Sates, Anambra state polytechnic having 9 OTM lecturers, 25 OTM lecturers in Federal Polytechnic Nekede, Owerri, 15 from Imo State Polytechnic, Umuagwo, and 16 in Oko Polytechnic. There was no sampling technique hence, the entire population was used in the study. Structured questionnaire titled " Digital Resource Utilization in OTM programme (DRUOTMP) was used for data collection. The questionnaire consisted of two sections A and B. Section A contained item on demographic information of the respondents such as age and years of teaching experience while Section B contained 21 items according to the research question. The instrument is structured on a five-Point rating scale of Very Greatly Utilized (VGU), Greatly Utilized (GU), Moderately Utilized (MU), Lowly Utilized (LU) and Very Lowly Utilized (VLU). The face and content validity of the instrument was established using the opinions of three experts; two experts in OTM and one expert from Measurement and Evaluation. The reliability of the instrument was carried out using pilot-test and data collected were calculated with Cronbach's alpha to determine the internal consistency of the instrument and which yielded a coefficient value of .91. The author with the help of two research assistants administer the instrument on the respondents. On the spot collection of questionnaires was employed and those who did not fill theirs immediately were revisited on another agreed date. Out of 65 copies of questionnaire distributed, 60 were correctly filled and returned and used for data analysis. Mean and standard deviation was used to answer the research question T -test statistic was used to test the null hypotheses a- 05 significant level. . Decision rule for the study was established at a mean of 2.50 and above was considered positive while any mean less than that was regarded as negative. A hypothesis was rejected where the p - value is less than the significant value. Otherwise, the null hypothesis was accepted. The data analysis was carried out using statistical package for Social Sciences (SPSS) version 23.

Results

What is the level of digital resource utilization in OTM programme?

Table 1: *Respondents' mean ratings and standard deviation on the extent of utilization of digital resources for instructional delivery of OTM courses towards students' acquisition of employability skills (N = 60)*

S/N	Items on Utilization of Digital Resources	$\overline{X}$	SD	Remarks
1	DVD/CD-ROM	3.45	.87	Moderately Utilized
2	E-mails	2.56	.51	Moderately Utilized
3	E-books	3.21	.66	Moderately Utilized
4	Adobe Acrobat documents	4.35	.81	Greatly Utilized
5	YouTube	1.49	.76	Very Lowly Utilized

6	Virtual Learning Environment (VLE)	1.57	.61	Lowly Utilized
7	ILearn	1.41	.91	Very Lowly Utilized
8	Google Classroom	2.39	.82	Lowly Utilized
9	Webcam	1.48	.66	Very Lowly Utilized
10	Learning Management System (LMS)	1.57	.67	Lowly Utilized
11	Internet	2.89	.52	Moderately Utilized
12	E-magazines	1.50	.61	Lowly Utilized
13	E-serials	1.44	.81	Very Lowly utilized
14	E-dissertations and theses	2.58	.54	Moderately Utilized
15	World Wide Web (WWW),	3.43	.75	Moderately Utilized
16	Examination Scoring Machine (ESM).	1.41	.66	Very Lowly Utilized
17	Online Public access catalogues	1.47	.41	Very Lowly Utilized
18	Flipped Classroom	1.38	.81	Very Lowly Utilized
19	Multimedia classrooms (audio-visual centers)	1.49	.72	Very Lowly Utilized
20	Digital library	2.49	.76	Lowly Utilized
21	Reference databases.	1.34	.39	Very Lowly Utilized
	Cluster Mean	2.25		Lowly Utilized

Data in Table 1 reveals that the OTM lecturers lowly utilize digital resources for instructional delivery of OTM courses towards enhancing students' acquisition of employability skills. This is shown by the cluster mean of 2.25 which fell within the lowly utilized category. The item by item analysis indicates that out of 21 items listed on extent of utilization of digital resources, item 4 is greatly utilized with mean of 4.35, items 1, 2, 3, 11, 14 and 15 are moderately utilized with mean ranging from 2.56 to 3.45, items 6, 8, 10, 12, and 20 are lowly utilized with mean ranging from 1.50 to 2.39 while the remaining 8 items are very lowly utilized with mean ranging from 1.34 to 1.49. The standard deviation for all the items is within the same range meaning that the respondents are not wide apart in their mean ratings.

Hypothesis 1

There is no significant difference in the mean ratings of OTM lecturers on the level of digital resource utilization in OTM programme based on age.

Table 2: *Summary of t-test comparison of the mean ratings of lecturers on the extent of utilization of digital resources for instructional delivery of OTM courses towards students' acquisition of employability skills based on age*

Age	N	$\bar{X}$	SD	df	T-value	P-value	Decision
18-40 years old	39	1.76	.51				
				58	1.30	1.00	Not Significant
41 years and above	21	1.87	.66				

Data in Table 2 show the mean ratings of OTM lecturers between 18-40 years old ($\overline{X}$ = 1.76, SD = .51) and those between 41 years and above ($\overline{X}$ = 1.87**,** SD =.66), with a degree freedom of 58. The t-value of1.30 has a p-value of 1.00 which is greater than the alpha level of >.05. Since the p-value is greater than the significant value, the null hypothesis is therefore accepted. This means that there is no significant difference in the mean ratings of OTM lecturers in polytechnics on the extent of utilization of digital resources for instructional delivery of OTM courses towards students' acquisition of employability skills in polytechnics in Anambra and Imo States based on age.

Hypothesis 2

There is no significant difference in the mean ratings of OTM lecturers on the level of digital resource utilization in OTM programme based on years of teaching experience.

Table 3: *Summary of t-test comparison of the mean ratings of lecturers on the extent of utilization of digital resources for instructional delivery of OTM courses towards students' acquisition of employability skills based on years of teaching experience*

Years of Experience	N	$\bar{X}$	SD	Df	T-value	P-value	Decision
1-5 years	20	2.11	.75				
				58	.10	.82	Not Significant
6 years and above	40	2.27	.69				

Data in Table 3 show the mean ratings of OTM lecturers with 1-5 years experience ($\overline{X}$ = 2.11, SD = .75) and those between 6 years and above (**X** = 2.27**,** SD =.69), with a degree freedom of 58. The t-value of.10 has a p-value of .80 which is greater than the alpha level of >.05. Since the p-value is greater than the significant value, the null hypothesis is therefore accepted. This means that there is no significant difference in the mean ratings of OTM lecturers in polytechnics on the extent of utilization of digital resources for instructional delivery of OTM courses towards students' acquisition of employability skills in polytechnics in Anambra and Imo States based on years of teaching experience.

Discussion

Findings of the study revealed that digital resources are lowly utilized by lecturers for instructional delivery of OTM courses for students' acquisition of employability skills in

polytechnics in Anambra and Imo State. The findings showed that only Adobe Acrobat documents are greatly utilized while the majority of the digital resources listed are either lowly utilized or moderately utilized. The findings of this study could be attributed to constraining factors affecting the utilization of ICT resources in tertiary institutions in Nigeria such as lack updated e-libraries, lack of internet facilities, network challenges and inadequate connection as well as inadequate of digital literacy among lecturers. In agreement, Odili, Adetona and Eneh (2020) observed that few of the tertiary institutions' digital resources in Nigeria are current and that most higher learning institutions in Nigeria lack updated e-libraries with enough digital resources. Odili et al. regretted that the majority of Nigeria's tertiary institutions' libraries still include roughly 70% hardcover volumes. In support, Ansari (2020) stated that network challenges and inadequate connection have an impact on how well tertiary institutions in developing nations download and use digital resources (Nigeria inclusive). Similarly, Ezenwafor and Nwachukwu (2020) reported that OTM lecturers rarely utilize digital resources for instructional delivery. This is in line with the earlier findings of Emeasoba and Nweke (2016) which showed that OTM lecturers in the polytechnics utilized digital resources in teaching at a low extent while traditional instructional methods still dominate. Emeasoba and Nweke concluded that the situation could be due to the OTM lecturers' lack of confidence and skills in utilizing the resources. Furthermore, Akasi and Nwabufo (2016) decried the under-utilization of digital resources and reliance on manual and technical resources by OTM lecturers in Nigeria.

Findings of the study also indicated that both age and years of teaching experience were not significant factors on the extent lecturers utilize digital resources for instructional delivery of OTM courses. The findings in relation to age factors is supported by that of Keržič et al. (2021) which showed that despite certain age-related disparities occur in lecturers' digital resource usage, age was not a determinant in instructional ICT use. However, Nwachujwu and Eneh (2018) differed with Keržič et al.'s findings by reporting that age was a significant factor on business education lecturers' utilization of digital resources in their teaching delivery. Amuzu (2018) on the other hand observed that lecturers' years of experience affected how they utilize digital resources to deliver training. The researcher is of the opinion that digital resources may not be available in OTM departments in polytechnics which could have made it difficult for OTM lecturers regardless of their age and experience to greatly utilize them for instructional delivery.

Conclusion

Based on the study's findings, it was concluded that OTM lecturers in polytechnics in the states of Anambra and Imo are not utilizing digital resources to the fullest extent possible to give their students the employability skills they need to find work and be independent in the current digitally-driven era. It demonstrates how the lecturers are falling behind in digital resource usage for instructional delivery which reduces the job prospects for their students.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Management of polytechnics should endeavour to encourage all OTM lecturers in the study area who lack digital literacy to pursue training in order to improve their ability to deliver high-quality instruction.
2. Through seminars and conferences, professional organizations such as Association of Business Educators of Nigeria (ABEN) should endeavour to raise more awareness of the many advantages of digital resources for effective instructional delivery of OTM courses.

3. The administration of polytechnics in Anambra and Imo States should endeavor to ensure that OTM laboratories are properly furnished with contemporary digital resources and power sources so that lecturers can adequately make use of them for instructional purposes

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