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NAU JOURNAL OF TECHNOLOGY AND VOCATIONALEUCATION is an annual journal published by the Department of Technology and Vocational Education, Nnamdi Azikiwe University, Awka. The journal aims at encouraging scholars and researchers to make effective contributions in the areas of teaching and learning of Technology/Vocational Education and other related fields.

GUIDELINES TO CONTRIBUTORS

1. Submit three copies of your article, which must be typed in double line spacing on A4 size paper and should not exceed 15 pages including references.
2. Article must be prepared in accordance with the American Psychological Association (APA) manual.
3. One separate page should be used for the author's name, status and contact address.
4. Abstract of not more than 200 words should accompany the article on a separate sheet.

All correspondence should be forwarded to the secretary:

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FROM THE EDITORIAL DESK

This edition of NAU Journal of Technology and Vocational Education has been packaged with research works of erudite scholars. The articles published herein have been carefully selected from a pool of articles submitted by conscientious scholars of repute, covering strategies for improving technical and vocational education programme, and other studies on information and communication technology; corporate social responsibility practices, safety practices of industries, entrepreneurship development and work performance.

The articles in the journal have gone through the process of double blind peer-review in line with international standard. The NAU Journal of Technology and Vocational Education is therefore stationed to serve as a vehicle for academics and researchers to share ideas on contemporary issues in the field of education and beyond. The journal will be of tremendous help to students, researchers and educators,

The Editorial Board gives thanks to all the researchers who contributed to this edition. It is our fervent hope that the articles presented herein will not only beget development but also spur into action, the conduct of further researches that will ensure a continued production of editions of the journal.

Nnaji for. F. N., PhD

Senior Lecturer

Editor-in-chief.

MESSAGE FROM HEAD OF DEPARTMENT

The Nnamdi Azikiwe Univesity Journal of Technology and Vocational Education (NAUJTVE) is a peer-reviewed academic Journal published by the Department of Technology and Vocational Education, Nnamdi Azikiwe University, Awka, aimed at highlighting the academic research of staff and students of the university and professionals outside the university, the aim of the journal is to cointribute to the growth of scholarship in the university and society in general.

It is our hope that the aticles contained herein will immensely contribute to the growth of Technology and Vocational Education and the growth of knowledge, skills and requisite attitude needed in the 21st century work place.

Prof. C. M. Ile

HOD

Technology & Vocational Education Department

Nnamdi Azikiwe Univesity

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ASSESSMENT OF MENTORING PRACTICES INFLUENCING BUSINESS EDUCATORS IN TERTIARY INSTITUTIONS IN EDO AND DELTA STATES

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Abstract

This study assessed mentoring practices influencing business educators in Edo and Delta States. Two research questions guided the study while three null hypotheses were tested at 0.05 level of significance. The study adopted a descriptive survey design using a sample of 231 business educators. A 16-item questionnaire was utilized for the study. The Cronbach's alpha was used to determine the reliability of the instrument, which yielded co-efficient of .95 and 0.85 for the two sub-sections of the instrument with an aggregate reliability of 0.90. Mean and standard deviation were used to answer the research questions. The z-test and analysis of variance (ANOVA) were used to test the null hypotheses. The findings of the research questions revealed that formal mentoring does not influence business educators. Informal mentoring was found to be the dominant mentoring practice influencing business educators in Edo and Delta States. Hypotheses testing showed no significant difference on mentoring practice of business educators either by gender, types of tertiary institutions or state of domiciliation of institution. This implies that management of tertiary institutions in Edo and Delta States neither plans, implements nor evaluates mentoring practices for business educators. It was therefore concluded that mentoring practices for business educators in Edo and Delta States is inadequate to meet business educators' career growth and development needs. It was therefore, recommended among others that authorities of tertiary institutions in Edo and Delta State especially of Department of Business Education should compulsorily institute formal mentoring practice in addition to the available informal professional mentoring for business educators. This could help to give more opportunities to the young/inexperienced business educators to learn from the wealth of experience of the older and more experienced business educators so as to enhance their professional commitment.

Keywords: Mentoring, Business Educators, Management

Introduction

The urgent need to maintain a competitive edge in the 21st century and era of information and communication technology make many organizations including tertiary educational institutions to employ so many in-service training, learning and development techniques such as mentoring for their employees. In recent times, there is a renewed interest in the use of mentoring to properly equip, supervise, manage and motivate employees for proper career growth and development beyond what was acquired in formal schools to enhance the commitment and improve on the job performance of employees. Mentoring has become one of the techniques designed and encouraged by organizational authorities to develop its personnel and promote staff competitive advantages.

Mentoring is a relationship which involves a more experienced and/or knowledgeable individual (mentor) who acts as a counselor, role model, teacher, and guidance of a less experienced or knowledgeable individual (mentee) for the purpose of sharing ideas, knowledge, and guidance and offering support for personal and professional development of mentee (Leavitt, 2011). The main purpose of any mentoring programme is to help mentees understand the nitty-gritty of their jobs well on time in order to facilitate personal growth and organizational performance. Mentoring can be undertaken in different organizations including tertiary institutions. Mentoring in academic settings may be undertaken in the areas of research/publications, practical instruction method, career/professional development, psychosocial support and community service. According to Emoefe (2016), mentoring helps the academic staff to develop natural strength and potentials for advancement in educational service including teaching, research and publications, and community service.

Mentoring is highly relevant to educators' career growth and development irrespective of their gender or type of institution or state of domiciliation of an institution. The reason for this is that a good measure of training and supervision obtained through mentoring could help business educators develop a greater feeling of competence and confidence in the teaching job. When mentees are competent and confident to take on greater tasks and perform more challenging duties, there would be a greater sense of empowerment, which is capable of improving their overall job performance. Mentoring as an on-the-job training programme has been successfully used by various organizations to enhance the commitment level of their employees (Sekhosana, 2001). Mentoring provides supportive supervision and encouragement that enhances employees' commitment and job performance. With effective mentoring, both the mentor and the mentee derive mutual benefits that are capable of helping them to be committed to their jobs and improve job performances.

Mentoring is usually provided for the development of employees in formal and informal practices in a workplace irrespective of gender. According to Emoefe (2016), there are two mentoring practices (formal and informal mentoring

practices) among academic staff in universities in Nigeria. Okurame (2008) however, found mentoring practice is organized, structured, and have clear and specific departmental or organizational goals while informal mentoring practices are not structured, not organized, no clear and specific departmental or organizational goals. Kram (1985) stated that if effectively implemented, whether formal or informal, mentoring practices provide career and psychosocial benefits for employees.

Formal mentoring has only recently emerged as a staff development strategy while informal mentoring has long been a feature of many work environments (Kehinde, 2013). According to Kehinde, formal mentoring occurs when an institution/department takes a decision to implement a scheme of mentoring which will have formal recognition within the institution/department even if there are no tangible rewards for being involved as a mentor or mentee. In formal mentoring relationship, a senior employee is assigned to nurture the career and job development of a newer or younger or less experienced employee (Adesina, 2013). This way, the department or organization dictates the beginning and ending dates to the mentoring relationship, provides expectations for how often the mentees are to meet with their mentors, requires regular check-in points with a programme coordinator, and offers a formal orientation or training session and often a formal closure to the programme. According to Adeyanju (2013), one of the major advantages of formal mentorship is that it ensures that mentorship is extended to individuals and minorities who would not have been considered previously within the organization.

Informal mentoring referred to as traditional mentoring, focuses primarily on the mentee's career path through goal setting (Adesina, 2013). The mentor and mentee work together to devise an action plan that sets career goals that will lead the mentee on the appropriate career path. Meanwhile, Bilesanmi (2013) stated that this type of mentoring is void of a precise structure and the rules are often at the discretion of the mentor who defines the parameters, expectations and approach. One of the major features and at the same time, one of the major disadvantages of informal (traditional) mentoring is that it is highly selective and elitist in nature (Byrne in Adeyanju, 2013). According to Adesina (2013), major characteristics of informal mentoring are that it is a natural process; that is the mentor and mentee pair together by their own internal forces. It involves frequent social interactions between the mentor and mentee resulting in the mentee and mentor spending time outside of the office and sharing a friendly, comfortable relationship. Friendship rather than job requirements, keeps the two parties together.

There are mainly three types of tertiary institutions in Nigeria; namely; colleges of education, polytechnics and universities. Edo and Delta States are educationally advantage states with a lot of these tertiary institutions. To this end, they have high number of tertiary institutions offering business education. However, it appears that business educators in Edo State practice more mentoring

than their counterparts in Delta State because it has more federal universities than Delta State. However, University of Benin as a first generation university has been in existence for decades with so many renounce professors who can function as mentors compared to Delta State.

In these tertiary institutions, male educators appear to find it easier to embrace mentoring more than their female counterparts. This is probably because women are usually saddled with domestic chores that make it difficult for them to fully embrace mentoring as compared to males. In terms of cross-gender mentoring, fear of sexual molestation may make women not to submit to or be interested in cross-gender mentoring. In Nigerian society, sexual accusations and rumours of sexual engagement are usually bearable for the male gender more than their female counterparts thereby making it difficult for women to expose themselves and engage in meaningful cross gender mentoring relationships. There may also be a concern about societal wrong impression of the mentoring relationship which may make male mentors not to want to establish mentoring relationships with women especially those who are married. All these issues have serious negative implications for female business educators' advancement on the job.

Several studies have shown that mentoring has the potential to influence educators' commitment and job performance irrespective of gender or type of institutions. However, Olasupo (2013) stated that the effects of mentoring relationships remain almost the same across different types of schools. According to Alibegovic, Hawkins and Parmar (2009), the role-modeling support provided through mentoring is highly influential in employees' job satisfaction and organizational commitment and overall job satisfaction has a strong relationship with job performance. In the same vein, Bartley-Daniele (2014) noted that different types of mentoring relationships occur in formal workplace settings to influence employees' career growth and development. Ehrich (2013) reported that in research studies done by Hansford, Tennent and Ehrich in which the influence of mentoring were examined, it was found that several influential outcomes are available for mentors in ideal mentoring relationships while for the mentees, the most frequently cited being collegiality, collaboration and networking. In some cases, these benefits are related to cross-fertilization of ideas and the opportunity to exchange ideas. Meanwhile, Anijaobi-Idem and Archibong (2012) stated that there are no formal programmes such as mentoring to ease the absorption of new and novice academic staff into the university system or any other tertiary institution of learning in the country while Emoefe (2016) stated that there are two mentoring practices (formal and informal mentoring practices) among academic staff in universities in Edo and Delta States. However, Emoefe (2016) did not show any significant difference in informal mentoring practice in the universities in Edo and Delta States.

Effective mentoring practices whether formal or informal may influence the career growth and development of educators. However, despite these numerous assertions, there is a dearth of empirical information on mentoring practices influencing business educators in Edo and Delta States. Many of the empirical studies available and reviewed were done in the industrial sectors using factory workers and not related to business educators. Also, many of the studies were conducted in foreign countries outside Nigeria. It was also observed that these studies used non-homogenous and non-randomized samples that are general and not specific to business educators. This situation creates a serious gap which this study tended to fill.

Statement of the Problem

Mentoring is a tool that can help to bring business educators into relationships for the purpose of sharing ideas, knowledge, and understanding so as to provide support for improved commitment and performance on their jobs. Despite the numerous empirical evidences on the benefits of mentoring to employees' career growth and development, there seem to be a dearth of information on mentoring practices influencing business educators in their career growth and development in Nigeria general and particularly in Edo and Delta States thereby creating a serious gap which this study tended to fill. Against this back drop, this study assessed mentoring practices influencing business educators in Edo and Delta States.

Research Questions

The following two research questions guided this study:

1. Does formal mentoring practice influence business educators in Edo and Delta States?
2. Does informal mentoring practice influence business educators in Edo and Delta States?

Hypotheses

1. There is no significant difference in the mean ratings of male and female business educators on mentoring practices influencing business educators.
2. There is no significant difference in the mean ratings on mentoring practices influencing business educators based on state of domicile of institutions.
3. There is no significant difference in the mean ratings on mentoring practices influencing business educators based on ownership of institution.

Method

This study adopted descriptive survey design. The population of the study was 231 business educators in tertiary institutions in Edo and Delta States. The

entire population was used as sample because the size was manageable. Data were collected using a structured questionnaire titled Assessment of Mentoring Practices influencing Business Educators in Tertiary Institutions in Edo and Delta States (AMPI-BETI). The items in the questionnaire were adapted from Emoefe (2016) and from the literature reviewed. The instrument was structured on five (5) point response scale of Strongly Agree (SD), Agree (A), Disagree (D), Strongly Disagree (SD) and Not Sure/weighted 5, 4, 3, 2 and 1 respectively. The instrument was validated by three experts in the field of business education. To determine the reliability of the instrument, it was pilot tested on 20 business educators who were not part of the sample. Data collected were analyzed using Cronbach's alpha test and reliability co-efficient of .95 and 0.85 were obtained for the two clusters with an aggregate reliability of 0.90. Copies of the questionnaire were administered to the respondents in their various schools by the researcher with the help of three (3) research assistants. The data collected were analyzed using mean, standard deviation, z-test and analysis of variance (ANOVA). A mean of 3.50 was set as the criterion rule for acceptance of the research questions, such that a mean rating on any item by the respondents equal to or above 3.50 was taken as "Agree" while a mean lower than 3.50 was taken as "Disagree". The hypotheses were tested using z-test at 0.05 level of significance. A null hypothesis was upheld where the z-calculated was less than the z-critical. Where the t-calculated was equal to or greater than t-critical, the null hypothesis was rejected.

Result

Research Question 1: Does formal mentoring practice influence business educators?

Table 1: Respondents' Mean Rating on Formal Mentoring Practice influencing Business Educators

S/N	Formal Mentoring Practices	Mean	SD	Remark
1	There are clear and specific departmental goals for mentoring business educators	3.13	.99	D
2	There is departmental or school follow-up to benchmark the success of mentoring so as to develop best practices.	2.99	.94	D
3	Mentoring is based on departmental or school interest	2.03	1.03	SD
4	Department or school formally pairs junior/inexperienced business educators with senior/experienced business educators for mentoring relationship based on academic specialization	3.24	.97	D

5	Department or school has a timeframe for mentoring business educators	2.99	.78	D
6	There are organized expert training on mentoring relationships for business educators	2.82	.84	D
7	Department assigns junior/inexperienced and senior/experienced business educators compulsorily for the purpose of mentoring	2.95	.86	D
8	Department provides time table on how often the junior/inexperienced and senior/experienced business educators could meet for mentoring relationships	2.78	.88	D
9	Mentoring of business educators is strictly under the supervision of the department	3.33	1.00	D
Aggregate Mean		2.91		D

Note. SA = strongly agree, D = disagree

Data in Table 1 show that the respondents disagreed with all the nine items relating to formal mentoring with mean values which ranged from 2.03 – 3.33. This result shows that business educators disagreed that formal mentoring was influencing them in their respective institutions. However, item 3 has a mean score of 2.03 showing that the respondents strongly disagreed that formal mentoring was influencing them. The aggregate mean score of 2.91 fell within the boundary of disagreed. The result of the study equally showed that the standard deviation of all the items ranged from 0.78 - 1.02 showing that the standard deviation for all the items are within the same range indicating that the respondents are not wide apart in their mean ratings.

Research Question 2: Does informal mentoring practice influence business educators in Edo and Delta States?

Table 2: Respondents' Mean Rating on Informal Mentoring Practices influencing Business Educators

	Informal Mentoring Practices	Mean	SD	Remark
1	Mentoring between junior/inexperienced and senior/experienced business educators is on individual basis	3.73	.87	Agreed
2	Mentoring relationships develop naturally between junior/inexperienced and senior/experienced business educators	3.90	.80	Agreed
3	Junior/inexperienced and senior/experienced business educators enter into mentoring relationships at will	3.80	.98	Agreed

4	Junior/inexperienced and senior/experienced business educators terminate mentoring relationships at will	3.67	.98	Agreed
5	Junior/inexperienced and senior/experienced business educators mentoring relationships have immeasurable outcomes	3.94	.92	Agreed
6	Mentoring for junior/inexperienced and senior/experienced business educators is for indefinite timeframe	3.89	1.03	Agreed
7	Goals for mentoring junior/inexperienced and senior/experienced business educators are unspecified	3.70	1.02	Agreed
Aggregate Mean		3.80		Agreed

Data in Table 2 show that the respondents agreed to all the 7 items relating to informal mentoring with mean values which ranged from 3.70 – 3.94. This result showed that business educators agreed that informal mentoring was influencing them in their respective institutions. The aggregate mean score of 3.80 fell within the boundary of agreed. The result of the study equally shows that the standard deviation of all the items ranged from 0.80 - 1.02 indicating that the standard deviation for all the items are within the same range indicating that the respondents are not wide apart in their mean ratings.

Hypothesis 1: There is no significant difference in the mean ratings of male and female business educators on mentoring practices influencing business educators.

Table 3: Summary of z-test analysis on mentoring practices influencing business educators

Variable	N	Mean	SD	df	Cal.z	Crit.z	Remark
Male	107	3.30	0.91				
Female	104	3.44	0.96				
		209	1.08	1.96	Not Significant		

Data in Table 3 showed that at 0.05 level of significance and 209 degree of freedom the calculated z value of 1.08 is lesser than the critical z of 1.96. This means that there is no significant difference in the mean ratings of male and female respondents on influence of mentoring practices. Therefore, the null hypothesis which states that there is no significant difference in the mean rating of male and female business educators on influence of mentoring practices is accepted.

Hypothesis 2: There is no significant difference in the mean ratings on mentoring practices influencing business educators based on types of institutions

Table 4: Summary of one-way ANOVA on mentoring practices influencing business educators based on types of institutions

Source of Variance	SS	df	MS	Cal.F	Crit.F	Remark
Between Groups	49.880	2	24.940	0.37	3.00	NS
Within Groups	14049.85	208	67.547			
Total	14099.753	210				

Data in Table 4 reveal that at 2 and 208 degrees of freedom, the calculated f value of 0.37 is lesser than the critical f of 3.00. This means that there is no significant difference in the mean ratings on mentoring practices influencing business educators based on types of institutions. Therefore, the null hypothesis which states that there is no significant difference in the mean ratings on mentoring practices influencing business educators based on type of institutions was accepted.

Hypothesis 3: There is no significant difference in the mean ratings on mentoring practices influencing business educators based on State of institution

Table 5: Summary of z-test on mentoring practices based on state of domiciliation of institution

Source of variation	N	Mean	SD	DF	Cal. z	Crit. z	Remark
State	144	3.19	0.67				
209	-0.37	1.96	NS				
Federal	67	3.23	0.74				

Data in Table 5 shows that at 0.05 level of significance and 209 degree of freedom the calculated z value of -0.37 is lesser than the critical z of 1.96. This means that there is no significant difference in the mean ratings on mentoring practices influencing business educators based on state of domiciliation of institution. Therefore, the null hypothesis which states that there is no significant difference in the mean ratings on mentoring practices influencing business educators based on State of domiciliation of institution is accepted.

Discussion

The findings of the study showed that business educators in Edo and Delta States agreed that formal mentoring did not influence them either by gender, type of institution or state of domiciliation of institution. The implication of this finding is that the tertiary institutions in Edo and Delta States neither plan, implement or

evaluate mentoring practices for business educators. This result is in line with the work of Anijaobi-Idem and Archibong (2012) which stated that there are no formal programmes such as mentoring to ease the absorption of new and novice academic staff into the university system or any other tertiary institution of learning in the country. There is therefore, a deficiency on the part of the management of universities, polytechnics and colleges of education in Edo and Delta States in providing a structured and planned mentoring programme for the development of their academic staff. This finding is however, in dissonance with the findings of the study by Emoefe (2016) which stated that there were two mentoring practices (formal and informal mentoring practices) among academic staff in universities in Edo and Delta States. There is the need therefore, for the policy makers for tertiary institutions in Nigeria such as the National Universities Commission (NUC), National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE) to include topics on mentoring in the approved minimum academic benchmark for business education and OTM programmes. Inclusion of mentoring in the minimum benchmark would help both educators and students to fully understand the concept.

The finding of the study showed that business educators in Edo and Delta States agreed that informal mentoring influenced them in their respective tertiary institutions irrespective of gender, type of tertiary institution or state of domiciliation of institution. The finding revealed that business educators in Edo and Delta States both agreed that informal mentoring practice influence them greatly on their teaching job. This is in line with the finding of Okurame (2008) which found that mentoring relationships in Nigerian academia experiences were mainly informal. This is a source of encouragement to the departments of business education Edo and Delta States. The implication of this is that business education departments in Edo and Delta States will continue to have business educators who are well mentored to achieve the goals and objectives of the departments.

The test of hypotheses revealed that there was no significant difference in the meaning ratings of male and female business educators on influence of mentoring practices. Both male and female business educators were not influenced by formal mentoring relationships. The implication of this was that they all depended on informal mentoring practice to influence their career growth and development. This finding is in line with the view of Emoefe (2016) which stated that gender did not show any significant difference in informal mentoring practice in the universities in Edo and Delta States. Mentoring although informal has provided equal opportunity for both male and female business educators to take on greater tasks and perform more challenging duties, thereby making business educators to have a greater sense of empowerment which has increased their overall commitment and job performance. There is no gender bias and marginalization. This is quite encouraging. The implication of this is that business education department in Edo and Delta States will continue to have business

educators with optimal commitment and performance in their teaching jobs. This will help to improve the quality and quantity of products from these departments.

The test of hypotheses also revealed that there was no significant difference in the meaning ratings of business educators on the influence of mentoring practices based on types of institutions. This implied that all the respondents from the three categories of schools (universities, polytechnics and colleges of education) used for this study agreed that they were not influenced by formal mentoring while they all agreed that informal mentoring practice greatly influenced their career growth and development in respective institutions. This showed that mentoring relationships for business educators is on individual basis and develops naturally between experienced and inexperienced business educators without departmental/institutional intervention. Departments/institutions do not also evaluate to know whether mentoring relationships were successful or not. This finding negated the assertion made by Bartley-Daniele (2014) that different types of mentoring relationships occur in formal workplace settings to influence employees' career growth and development. For business educators in Edo and Delta States, only one type occurs. The result by implication pointed out that the nature of the organization or environment can influence the type of mentoring practice in place. It also means that the authorities in business education department in these schools are not fully abreast with the benefits of mentoring in the development of their academic staff despite considerable empirical support of the importance of mentoring in the commitment and job performance of employees hence, they do not plan or implement mentoring for business educators. There is the need therefore, to institutionalize the culture of well-designed formal mentoring programmes with clear expected outcomes.

There was also no significant difference in the mean ratings on mentoring practices influencing business educators based on state of domiciliation of the institution. This finding negated the views of Emoefe (2016) which revealed that demographic characteristics such as ownership of universities, academic discipline, generation of universities, state of domicile and age of academic staff have a significant difference in informal mentoring practice among academic staff. There is the need therefore, for the policy makers for tertiary institutions in Nigeria such as the National Universities Commission (NUC), National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE) to include topics on mentoring in the approved minimum academic benchmark for business education programme. Inclusion of mentoring in the minimum benchmark would help both educators and students to fully understand the concept.

Conclusion

Mentoring is a tool that can help to bring business educators into relationships for the purpose of sharing ideas, knowledge, and understanding so as to provide support for improved commitment and performance on their jobs. The finding of

this study showed that mentoring is offered to business educators in tertiary institutions in Edo and Delta States predominantly in an informal practice irrespective of gender, type of institution or state of domiciliation of institution. This implies that management of tertiary institutions in Edo and Delta States neither plan, implement nor evaluate mentoring practices for business educators. It is therefore concluded that mentoring practices for business educators in Edo and Delta States is inadequate to meet their career growth and development. Therefore, authorities in charge of business education in tertiary institutions in Edo and Delta States should put in place institutional/departmental policies that would compulsorily make formal mentoring of all junior/inexperienced business educators a part of job responsibilities for senior/experienced business educators. This could help to give more opportunities to the young/inexperienced business educators to learn from the wealth of experience of the older and more experienced business educators so as to enhance their professional commitment.

Recommendations

In view of the findings of the study, the following recommendations are made:

1. Authorities in charge of business education in tertiary institutions in Edo and Delta States should not only sustain but improve upon the level of informal mentoring presently on ground to continue to influence business educators' career growth and development.
2. Authorities in charge of business education in tertiary institutions in Edo and Delta States should put in place institutional/departmental policies that would compulsorily make formal mentoring of all junior/inexperienced business educators a part of job responsibilities for senior/experienced business educators.
3. Authorities in charge of business education in Edo and Delta States should institute the culture of multiple mentoring practices because the functions of mentoring in academic settings are quite diverse. A single individual mentor may not be able to provide all that an individual business educator needs across the entire career.

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OFFICE TECHNOLOGY AND MANAGEMENT EDUCATION STUDENTS' SELF-EVALUATION OF ACQUIRED WORD PROCESSING AND DATABASE MANAGEMENT COMPETENCIES IN DELTA STATE

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Abstract

The need for an enhanced word processing and database management competencies acquisition by Office Technology and Management Education (OTME) students for success in employment, necessitated this study. Two research questions guided the study and two null hypotheses were tested. Descriptive survey research design was adopted for the study. The population consisted of 98, 2016/2017 session final year OTME students in all colleges of education in Delta State. The entire population was studied without sampling as the size was small. A five-point rating scale questionnaire containing 26 items was used for collecting data for the study. The instrument was validated by three experts in the faculty of education, Nnamdi Azikiwe University, Awka. The reliability of the instrument was established by administering it to 10 respondents from College of Education, Ekiadolor in Edo State. Using Cronbach Alpha method, a reliability coefficient of 0.87 was obtained. Mean and standard deviation were used to answer research questions and determine the closeness of respondents' views. While t-test was used to test the null hypotheses at 0.05 level of significance. Findings revealed that the students rated themselves to have acquired word processing and database management competencies at moderate level and gender did not significantly influence their ratings. Based on the findings, it was concluded that more efforts were needed by the students, their lecturers and the institution managements to ensure that students adequately acquire relevant competencies in the two applications for them to be effective in carrying out their professional responsibilities on graduation. It was, therefore, recommended among others that OTME students should use computers instead of typewriters right from their first year and that institutions managements should provide adequate number of functional computers for use by the students.

Keywords: Office Technology and Management, Self-evaluation, Acquired, Word processing, Database Management, Competencies

Introduction

Colleges of education have the mandate to produce competent graduates who would teach in primary and junior secondary schools or work in other sectors of the economy. It is a post-secondary education which awards Nigeria Certificate in Education (NCE) and degrees if affiliated to universities (Olise, 2013). The Federal Republic of Nigeria (FRN) (2013) posited that a college of education is an institution that provides knowledge, skills and training to students for the production of teachers and skilled personnel who shall be enterprising and self-reliant. College of education therefore, is a tertiary institution with the mandate to implement the NCE programme for the preparation and graduation of knowledgeable and skilled manpower who are awarded the Nigeria Certificate in Education.

Business education at the college of education level is designed to produce well qualified and competent Nigeria Certificate in Education (NCE) graduates who will be able to teach business subjects in Nigeria secondary schools and other related educational institutions; produce NCE business teachers who will be able to inculcate the vocational aspects of business education into the society and to equip graduates with the right skills that will enable them to enter and progress in the world of work (NCCE, 2012). Federal and state colleges of education in Delta State offer business education programme with options in accounting education and secretarial education (herein referred to as Office Technology and Management Education (OTME) and the lecturers are called business educators.

The introduction of information and communication technology (ICT) in the curriculum of business education demands that teachers should be adequately skilled in technology and can effectively teach the relevant subject matter contents using ICT resources. ICT and its resources are highly used in office technology and management education programme to enable students acquire competencies in office applications needed to succeed in chosen careers in this digital age. Office applications are computer programmes designed to help people perform diverse activities. As noted by Garba (2012), computer application software is referred to as office application packages or simply office applications by the producers. Some packages focus on single tasks, such as word processing while those called integrated softwares include several applications.

In order to equip students with ICT competencies, the NCE minimum standards provides that OTME students, in their final year, should offer a course titled BES 328: Information Technology and Computer Application with emphasis on word processing using Microsoft word or word star; data processing with Lotus/Excel (spreadsheet) application; desktop publishing, electronics data application systems dealing with batch processing, on-line processing and real-time processing systems among others. The emphasis is that students should be

exposed to operating procedures of the computer and other technological devices and it requires that computer usage for teaching and learning should be in the ratio of one computer to three students (1:3) and that every one hour of lecture should be followed by two hours of practice.

Before the advent of information technology (IT), a trained secretary was known to be an efficient office worker armed with knowledge of shorthand and typewriting and the typewriter serves as the key work equipment. In recent times, IT introduced a new dimension to the field through computer and other electronic devices that are constantly transforming the profession as reflected by the expectations of OTME students in tertiary institutions by the society. As a result, emphasis has shifted from shorthand and typewriting to computer applications and information technologies. These changes can be seen in the innovation and invention pertaining to equipment, nomenclature, technology, furniture, form designs, environment, responsibilities, training, skills, abilities, attitudes, knowledge, educational institutions and their curricula.

Computer is an electronic machine that operates under the control of instructions stored in its memory to accept data, manipulate the data according to specified rules, produce results and store the results for future use. According to Onyeizugbe and Orogbu (2015), a computer is an electronic device that accepts data from an input device, performs some kind of manipulations on the data in accordance with the defined instructions and transfers the manipulated or processed data to an output device for further processing or final printing. The use of electronic computer in information processing and production holds many advantages over manual typewriters used by secretaries in the past. For instance, given the right software, computer has the capability of processing information with great speed, accuracy, consistency, reliability and ability to handle large amount of data simultaneously within a limited time frame.

The modern office tends to be a challenging place to work for graduates who are inefficient in the use of computer and its resources as professionals in information technology use computer and office applications to input, process, output, store, communicate and manage information. According to Adamu in Adeola (2012), in the contemporary business world, the virtual office which is ICT-driven has replaced the traditional paper and file office. ICT utilization makes schools more efficient and productive thereby engendering a variety of tools to enhance and facilitate teachers' professional activities. The knowledge of computer technology and its resource is an indispensable tool to work with in today's business office and educational enterprise. Bolarinwa (2010) remarked that every aspect of life; from education to work environment is influenced by ICT. The invention of computer brought the greatest revolution in OTME programme as well as the business and work environment of the era. Computers have changed the way people live, work, and communicate and the society depends so much on computers to perform variety of functions.

It appears that students are major beneficiaries of technology especially for information management. The essence of the use of computers which ought to replace manual typewriters in the implementation of OTME programme is for improvement in word and data processing, storage and retrieval of information. It has also paved way for OTME students to join the trend in the world of information technology. Garba (2012) asserted that the invention of computer brought the greatest revolution in OTM programme formally known as secretarial studies, because it simplified all aspects of the functions thereby relieving the secretary the burden of repetitive tasks. This shows that today's OTME students need to be adequately equipped with relevant computer knowledge and skills of different applications especially word processing and database management to facilitate their transition from school to work.

Word processing software enables one to easily create all kinds of documents, letters, memoranda, mailing lists, greeting cards, labels, newsletter, business reports, business cards, letter heads and table. Computer is the major technological equipment used in teaching and learning of word processing. As stipulated in the NCCE Minimum Standard (2012), OTME students are to be exposed to the use of computer and its applications to input, edit, format, save, store, retrieve and print diverse documents. Students should possess skills to apply features, such as open/close a document, work with multiple windows, use menu and tool bars, minimize and close windows, change page layout and orientation, insert header, footer and page numbering to multiple page document among others. They should have the ability to quickly and correctly copy, cut and paste document, import an image and successfully transfer it to a desired destination. Finally, they need the ability to create and print mailable documents which is of utmost importance. The most popularly used word processing application is Microsoft word.

A database management system (DBMS) is an application used for creating and managing databases. It provides users and programmers a systematic way to create, store, retrieve, update and manage data and makes it possible for end users to create, read, update and delete in a database. DBMS essentially serves as an interface between the database and end users or application programmers, ensuring that data are consistently organized and remain easily accessible. It manages the data, the database engine that allows data to be accessed, locked and modified, and the database schema, which defines the database's logical structure. These three foundational elements help provide concurrency, security, data integrity and uniform administration procedures. The DBMS is perhaps most useful for providing a centralized view of data that can be accessed by multiple users, from multiple locations in a controlled manner. It can limit what data the end user sees as well as how that end user can view the data, providing many views of a single database schema. End-users and software programmers are free from having to

understand where the data are physically located or the type of storage media the data resides on because the DBMS handles all requests.

Competency means doing or ability to do something in a skilled or expert way as a result of training. Agbatogun (2011) conceptualized competency as the ability to perform basic computer operations and other activities such as maintenance and trouble shooting of equipment, use of word processing, spreadsheet, computer graphics, desktop publishing, database management and networking of computer system. Competencies as used in this study are ability to be proficient, efficient and skillful in the use of office applications such as word processing, spreadsheet, desktop publishing and database management to perform diverse activities. Database management competencies includes ability to create and append records to a database, edit and change existing records, delete old or unwanted records, rearrange records through sorting or indexing, find and locate specific records for specific purposes and also write reports on the contents of the database in details or summary. It is in recognition of the importance of application of the ICT and its resources that Ezenwafor (2012) urged individuals of different ages, levels and vocations to possess competencies and skills in ICT for success in their endeavours.

Students' acquisition of ICT competencies before and on graduation may, to a large extent, determine how easily they will enter and progress in the world of work in this digital age. Unfortunately, Bolarinwa (2011) observed that OTM students will be unemployable on graduation because they lack both the basic and core ICT skills needed to teach and work in modern business offices. This situation sends a dangerous signal and a threat to the students' employment and job security on graduation if not objectively addressed. Therefore, there is need to give students the opportunity to evaluate themselves on their acquired competencies in different office applications especially word processing and database management, so that they could identify their weaknesses and determine to improve in areas they are deficient.

Statement of the Problem

The use of computer and its resources in the training of Office Technology and Management Education (OTME) students is aimed at equipping them with relevant knowledge and competencies for success in their chosen career. This is because every aspect of life, education and work environment is influenced by Information and Communication Technology (ICT). It is, therefore, expected that graduates of OTME would possess high level of office application competencies and apply them effectively in employment as teachers, office workers or as entrepreneurs. Unfortunately, Yusuf (2009), Agbatogun (2011), Bolarinwa (2011) and Adeola (2012) observed that OTME graduates from colleges of education in Nigeria seem to lack the basic ICT skills needed to teach, evaluate students' performances and work in modern offices.

The graduates of this programme are basically trained to train others. Where they are not competent in applying the tools of their trade, they may likely not effectively teach others and be successful in employment in this current digital era. The problem of this study is that observation and empirical evidences reveal a gap in word processing and database management competencies expected of OTME students in colleges of education. This necessitated the study for the students to evaluate themselves in order to discover areas they need to give more attention to ensure job satisfaction in employment.

Purpose of the Study

The main purpose of this study was to ascertain the ratings of OTME students of colleges of education in Delta State on their acquired word processing and database management competencies. Specifically, the study ascertained OTME students' ratings on their acquired:

1. Word processing competencies
2. Database management competencies.

Research Questions

The following research questions guided the study:

1. What are the mean ratings of OTME students of colleges of education in Delta State on their acquired word processing competencies?
2. What are the mean ratings of OTME students of colleges of education in Delta State on their acquired database management competencies?

Research Hypotheses

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

1. There is no significant difference in the mean ratings of male and female OTME students of colleges of education in Delta State on their acquisition of word processing competencies.
2. There is no significant difference in the mean ratings of OTME students of federal and state owned colleges of education in Delta State on their acquisition of database management competencies.

Method

Descriptive survey research design was adopted for the study. The population of the study was 98 final year OTME students in all colleges of education in Delta State. The population size was not too large and was studied entirely without sampling. Data were collected with a structured questionnaire on a five-point scale of Very Highly Acquired (VHA, 4.50 – 5.00), Highly Acquired

(HA, 3.50 – 4.49), Moderately Acquired (MA, 2.50 – 3.49), Lowly Acquired (LA, 1.50 – 2.49) and Very Lowly Acquired (VLA, 0.05 – 1.49). The instrument was validated by three experts in the departments of Technology and Vocational Education and Educational Foundations, Nnamdi Azikiwe University, Awka. The reliability of the instrument was established by administering 10 copies to final year OTME students of College of Education, Ekiadolor in Benin City, Edo State, who were not part of the population of the study. Using Cronbach Alpha method, reliability coefficient scores of 0.82 and 0.93 were obtained for word processing and database management respectively, and an over-all coefficient of 0.87. The researcher and two research assistants administered 98 copies of the questionnaires to the respondents. A period of five days was used for the instrument administration and 96 copies were returned and used for analysis. The data collected were analyzed using mean and standard deviation to answer the research questions and ascertain the closeness of the respondents' mean, while t-test was used to test the null hypotheses at 0.05 level of significance.

Results

Table 1: Mean Ratings and Standard Deviation of OTME Students' Level of Acquired Word Processing Competencies

S/N	I Can Do The Following At:	Mean	SD	Remark
1	Create files and folders	3.91	1.07	HA
2	Speedily and accurately key-in text	3.48	1.02	MA
3	Format a document suitably	3.60	1.22	HA
4	Save document electronically	3.79	1.18	HA
5	Retrieve document electronically	3.32	1.30	MA
6	Use secondary storage devices	3.04	1.13	MA
7	Use options in the edit menu	3.21	1.27	MA
8	Insert headers and footers	3.15	1.44	MA
9	Insert pictures and symbols in a document	3.30	1.26	MA
10	Use table options	3.32	1.24	MA
11	Use word art to create and shape text in a document	3.27	1.45	MA
12	Address envelopes and labels	3.79	1.35	HA
13	Suitably use mail merge facility	2.57	1.09	MA
14	Print texts	2.18	1.34	LA
Cluster Mean/SD		3.28	1.24	MA

Table 1 shows that the mean ratings of four of the competencies range between 3.91 and 3.60 showing that the students acquired them at a high level while nine competencies have mean ratings ranging between 3.48 to 2.57, showing that they were possessed by the students at a moderate level. The remaining one has a mean rating of 2.18 showing that the students acquired it at a low level. The

cluster mean of 3.28 shows that the students rated themselves to have acquired word processing competencies at a moderate level. The standard deviations for all the items are within the same range, revealing that the respondents are not wide apart in their ratings.

Table 2: Mean Ratings and Standard Deviation of OTME Students' Level of Acquired Database Management Competencies

S/N	I Can Do The Following At:	Mean	SD	Remark
15	Create database document	3.10	1.50	MA
16	Speedily and accurately input data in a table	3.05	1.33	MA
17	Edit records in a table	3.07	1.39	MA
18	Format a table in database	2.71	1.32	MA
19	Define text field in database	2.75	1.42	MA
20	Add a field in database	2.56	1.38	MA
21	Remove a field in database	2.82	1.50	MA
22	Create queries	2.46	1.34	LA
23	Sort a query on multiple fields	2.41	1.36	LA
24	Control data access/security	2.54	1.32	MA
25	Restore data from backup files	2.56	1.43	MA
26	Print reports	3.02	1.60	MA
Cluster Mean/SD		2.75	1.41	MA

Table 2 shows that the mean ratings of 10 of the competencies range between 3.10 and 2.54 showing that the students acquired them at a moderate level while two items have mean ratings ranging between 2.46 to 2.41 showing that the students possessed them at a low level. The cluster mean of 2.75 shows that the students rated themselves to have acquired database management competencies at a moderate level. The standard deviations for all the items are within the same range, showing homogeneity in the ratings of the students.

Test of Null Hypotheses

Table 3: The t-test Analysis of Male and Female OTME Students' Mean Ratings on Acquired Word Processing Competencies

Gender	N	Mean	SD	Df	α - Level	t-cal	t-crit	Decision
Male	21	3.54	1.18	94	0.05	0.58	1.96	NS
Female	75	3.37	1.27					

Table 3 reveals that the calculated t-value of 0.58 is less than the critical t-value of 1.96 at 94 degree of freedom and 0.05 level of significance. This shows

that no significant difference exists between male and female OTME students in colleges of education in Delta State on how they evaluate acquired word processing competencies as a result of gender. The null hypothesis is therefore, accepted.

Table 4: The t-test Analysis of OTME Students' Mean Ratings on Acquired Database Management Competencies in Federal and State Owned Colleges of Education in Delta State

InstitutionOwnership	N	Mean	SD	Df	α-Level	t-cal	t-crit	Decision
Federal	31	2.62	1.36	94	0.05	-	1.96	NS
State	65	2.96	1.42			1.16		

Table 4 shows that the calculated t-value of -1.16 is less than the critical t-value of 1.96 at 94 degree of freedom and 0.05 level of significance. This indicates that no significant difference exists between how OTME students of federal and state colleges of education in Delta State evaluate acquired database management competencies on the basis of institution ownership. Therefore, the null hypothesis is accepted.

Discussion

Findings of the study were discussed in line with the variables as follows:

Word Processing Application Competencies

Findings of the study indicated that Office Technology and Management Education (OTME) students of colleges of education in Delta State rated themselves as having acquired word processing competencies at a moderate level. The finding corroborates the reports of Ajie-Uche and Jumbo (2016) who reported that the acquisition of word processing competencies is still below expectation. The authors admonished business teachers to strive to attain high level of acquisition of word processing competencies to enhance the realization of the objectives of business education and equip students for improved academic performance leading to success in self/paid employment. Ikelegbe (2016) asserted that those who are deficient in competencies of using word processing should proceed for further training to acquire skills for efficient work performance. It is through evaluation of the students that those deficiency areas could be discovered for improvement. Okoro in Shaibu, Ameh and Barinem (2016) asserted that the purpose of evaluation in business education is to determine whether students understand what they are being taught; provide feedback to students on how well they are doing; enable the teacher know students who need special attention; supply information needed in programme evaluation and curriculum development

and determine when students have the necessary knowledge and skills to graduate from the programme or enter the work-force.

As noted by Okoye (2010), with Microsoft word, an experienced teacher can effectively teach how to produce clean and quality typed document. This statement can be possible where these graduating OTME students have attained high level of competencies in word processing applications. But in this situation where the students' level of word processing acquisition is at moderate level, it points to the fact that these students cannot perform perfectly well in an ICT driven environment and in the virtual office as is required of them on graduation. Thus, OTME students' self-evaluation on their competency level in word processing will enable them reflect on their strengths and weaknesses and be motivated to put in more zeal in order to improve on areas of weaknesses before and after graduation. This is in agreement with the reports of Rajeev, Amit, Naveenta, Sonia, Meenal and Shashikant (2016) that self-evaluation can increase the interest and motivation level of students for subjects leading to enhanced learning and better academic performance; helping them in the development of critical skills for analysis of their own work.

The findings further revealed that gender did not significantly influence the respondents on level of acquired word processing competencies. This finding is in line with the findings of Garba (2012) that gender did not significantly influence OTM students' possessed word processing competencies.

Database Management Application Competencies

Findings of the study indicated that Office Technology and Management Education (OTME) students of colleges of education in Delta State rated themselves as having acquired database management competencies at a moderate level. This finding is similar to that of Goudy (2000) and Garba (2012) who reported that students were mostly barely proficient in database management application. Duran (2000) and Adeola (2012) reiterated that NCE graduate teachers (OTME inclusive) need to demonstrate high level of database management competencies and be professionally competent for the school system.

At this moderate level of database management competencies possessed by these graduating students, it is clear that they will be unable to effectively and efficiently create and append records to a database, edit and change records that already exist, delete old or unwanted records, rearrange records through sorting or indexing, find and locate specific records for specific purposes and write reports on the contents of the database in details or summary. Garba (2012) observed that the students' exposure to office application is grossly inadequate either as a result of inadequacy of competent lecturers, equipment and facilities, period allocation or lack of commitment on the part of the students and will adversely affect their performances in employment. Therefore, students' self-evaluation is necessary for them to identify their strengths and weaknesses in database management

application and seek for ways to correct such deficiencies for an enhanced academic and job performances upon graduation. Moreso, Rajeev, Amit, Naveenta, Sonia, Meenal and Shashi (2016) recommended students' self-evaluation as an effective tool for enhancing self-directed learning and that students should be motivated to self-assess themselves.

The findings equally indicated that respondents from federal and state owned colleges of education did not differ significantly in their level of acquired database management competencies. This corroborates that of Garba (2012) who reported that OTM students do not differ significantly in their mean ratings of proficiency in database management as a result of their institutions. The researcher therefore submitted that institution ownership does not influence students' acquisition of database management competencies, as stated in the NCCE minimum standards, as their lecturers and institution managements generally are able to guide students to achieve the objectives.

Conclusion

Based on the findings, it was concluded that the level of exposure in word processing and database management applications received by graduating students of Office Technology and Management Education (OTME) in colleges of education in Delta State is inadequate for them to be effective in carrying out their professional responsibilities on graduation, in the current technological and information era.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. OTME students should use computers instead of typewriters right from first year through the final year of their study to be conversant with its operations and diverse applications.
2. Institutions managements should organize capacity building workshops on ICT, on a regular basis for OTME lecturers, to keep them current and be able to transfer same to the students. It is an established fact that no educational system can rise above the quality of its teachers.
3. Government, employers of labour and other stakeholders in education should collaborate in providing adequate number of computers and other information technology resources for the programme. This is to ensure students practice effectively as stipulated in the NCCE Minimum Standards.

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ASSESSMENT OF DATABASE MANAGEMENT AND WEBPAGE DESIGN COMPETENCIES POSSESSED BY OFFICE TECHNOLOGY AND MANAGEMENT GRADUATE WORKERS IN NORTH-WEST NIGERIA POLYTECHNICS

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Abstract

The need to improve computer application competencies of graduates of Office Technology and Management (OTM) programme based on persistent complaints on their lack of the relevant competencies by employers necessitated this study on administrative supervisors' assessment of database management and webpage design competencies possessed by OTM graduate workers in North-West Nigeria polytechnics. Two research questions guided the study and four null hypotheses were tested. Descriptive survey research design was used for the study. The population was 378 administrative supervisors in state and federal polytechnics. The population was used as sample. A structured 5-point rating scale questionnaire containing 36 items in two clusters was validated by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka and used for data collection. The reliability of the instrument was established using split-half with Pearson Product Moment Correlation Co-efficient formula and reliability co-efficient value of 0.78 was obtained. Mean and standard deviation were employed to answer the research questions and determine the homogeneity of the respondents' views while t-test was used to test the null hypotheses at 0.05 level of significance. Findings revealed that the OTM graduate workers possessed database management competencies at a moderate level and possessed webpage design competencies at a little level. Gender and ownership of the institution influenced the respondents' views on database management competencies of the OTM graduate workers but did not on webpage design competencies. Based on the findings, it was concluded that the OTM graduate workers in polytechnics in North-West Nigeria do not possess the relevant competencies for effective utilization of database management and webpage design applications. It was, therefore, recommended among others that OTM graduate workers in North-West Nigeria Polytechnics should seek out and utilize self-sponsored opportunities to improve their level of competencies in the two applications to enable them perform their duties effectively.

Keywords: Administrative supervisors, OTM graduate workers, competency, database management application, webpage design application,

Introduction

Office Technology and Management (OTM) is a programme of study that was introduced in the year 2004 by the National Board for Technical Education (NBTE). The programme was designed to replace the old secretarial studies curriculum which was found inadequate as a result of technological revolution in the Nigerian education sector. The objective of the programme, as stipulated by the NBTE (2004), is to equip the students with office/secretarial skills and competencies essential for employment into any of computerized office. Secondly, it is intended to expose students to industrial work experience scheme that will give them the chance to demonstrate and practicalize their skills. Thirdly, it paves the way for the students to further their academic pursuit. Lastly, it develops in the students, an occupational intelligence that will make them versatile and adaptable to the changing situation in the world of work. Baba and Akarahu (2012), pointed out that the OTM aims at acquisition of appropriate skills, abilities and competencies, both mental and physical, as equipment for the individual to live and contribute to the development of the society and as well, to produce competent graduates of office technology and management.

Office technology and management graduates can be employed as confidential secretaries, administrative assistants or office technology managers and are expected to perform professionally in all ICT based tasks. Adelekin (2009) observed that OTM programme aims at providing the business world with highly skilled knowledge workers to serve as secretaries. These secretaries are expected to be equipped with a comprehensive range of skills including managerial, technological and communication to manage information efficiently. Anderson in Oguejiofor (2013) referred to a secretary as the one, who can think for the executive, acts for and anticipates the executive's whims. Therefore, the effective performance of a secretary in the office, depend on the type of supervision by the administrative supervisor.

Administrative supervisor is a person in charge of overseeing and directing a project or people. Administrative supervisor could be perceived as someone who is in charge of a particular department or unit. Arora (2012) defined administrative supervisor as an executive saddled with the responsibilities of overseeing the accomplishment of the assigned tasks or duties of subordinates. The administrative supervisor can be a member of the management team that plans, organizes, directs, coordinates and controls the activities of an organization toward the achievement of stated goals and objectives. Abdullahi (2012) maintained that an administrative supervisor is a senior staff who oversees the administration of an organization including the work done by subordinates. In essence, administrative supervisors are usually authorized to recommend and or effect hiring, discipline, promotion, punishment, reward and other activities associated with personnel management in

an organization. In this study, administrative supervisors are all senior officers in the polytechnics who have secretaries attached to them and are in a good position to assess their secretaries' computer application competencies.

Competency is the ability to carry out responsibility as expected. It is the acquired knowledge, skills and procedure that enable OTM graduate workers to meet established performance criteria. Okolocha and Olanye (2015) viewed computer application competency as the ability to use correct procedure to manipulate the machine software as required in order to obtain results. Computer application include database management system or webpage design application among others.

Database management system is a collection of data that relate together and stored for different usage with minimum duplication or redundancy. Database management system (DBMS) is a program that provides method of arrangement and storage for easy access. Sawyer and Williams (2009) stated that database management system is improvements over conventional file management system. In addition, Agomuo (2005) viewed database management system as a collection of data organized for storage in a computer memory and designed for easy access by authorized users. In summary, database management system stores, organizes and manages information in a manner that enhances performance of office routine task.

Oguejiofor and Umeh (2016) postulated that Microsoft access database is an all-encompassing term, which describes anything from an address book, dictionary or file cabinet to a set of computerized data file with sophisticated data relationship. MS Access allows the secretary to create custom database that store information in an organized structure. It provides a visual interface for creating forms, tables, report and queries. It enables the secretaries to send data to and from other database programs such as my SQL, FoxPro and Oracle. Pedraza (2011) asserted that database management system provides the secretary with a wide variety of templates that can be used to speed up database creation process. A template is a ready-to-use database that contains all of the tables, queries, forms, and reports needed for performing a specific task. These templates facilitate a secretary's work performance in the sense that the data can be recorded in such templates to automatically generate information.

Webpage design encompasses many different skills and disciplines in the production and maintenance of websites. The different areas of web design that enhance secretary's competency include web graphic design; *interface design*; authoring, including standardized code and *proprietary software*; *user experience design*; and *search engine optimization*. Often many individuals work in teams, covering different aspects of the design process, although some designers cover them all. The term web design is normally used to describe the design process relating to the front-end (client side) design of a website, including writing mark up (Hart & Cieller, 2007).

Horton (2014) defined webpage design as a collection of electronic files that determines the layout, colors, text styles, structures, graphics, images and use of interactive features that deliver pages of an organization. Webpage design therefore, encompasses different skills and technical know-how in the production and its maintenance. Additionally, Ibrahim and Kazeem (2015) explained that webpage design is typically written in static text and other content and stored within the web server file system or may be constructed by server site software when requested. Tony-Okeme and Mohammad (2016) asserted that webpage design refers to the art of creating, modifying and displaying the elements of a web page which are made up of text, graphics, movies links table and forms. Secretary's understanding of the content of a website to achieve competency often depends on the understanding of how the website works. Luke (2012) maintained that the secretary's ability to understand layout, clear instruction and labeling on a website enhance his competency in an organization. In order for a secretary to effectively and efficiently perform routine office tasks, there is need for him or her to competently utilize different ICT resources including database management and webpage design applications among others.

Statement of the Problem

Office Technology and Management (OTM) curriculum aims at equipping the graduates with office and ICT skills that will enable them to perform effectively in any modern office or organization. In today's technological era, graduates generally and OTM graduates in particular need to adequately possess both theoretical and practical ICT skills in order to properly fit into the office of any computerized organization and competently perform the functions of a secretary as recommended by the National Board for Technical Education (2004). However, the level at which the OTM graduate secretaries possess these database management and webpage design competencies depends on the extent of their exposure on the applications in the course of their training. This is why Ernest (2010) averred that OTM graduates who were not trained with the new technologies could not perform as expected in modern offices and would stand the risk of losing their jobs. In support of this, Grace (2015) reported that most OTM graduate workers in south-west of Nigeria were not performing as expected due either to inadequate training with modern facilities or other factors. Grace further affirmed that this deficiency will surely mar the achievement of the goals and objectives of their employers and organizations.

The problem of this study is that polytechnics churn out OTM graduates year-in and year-out who are not able to defend their certificates in the modern office of the current technological era. Some of these graduates are absorbed in the polytechnics which provide an opportunity for a type of in-house assessment by their supervisors to provide cogent evidence on their knowledge and competency level in using different applications especially database management and webpage

design to confirm the authenticity of the reports of other employers. This will go a long way in enabling authorities of the polytechnics to fashion out suitable strategies to adopt in the programme to ensure that the products are adequately equipped with relevant ICT competencies to satisfy their employers in the modern business and office environment and suitably represent their training institutions.

Purpose of the Study

The main purpose of the study was to determine administrative supervisors' assessment of database management and webpage design competencies possessed by OTM graduate workers' in North-West Nigeria Polytechnics. Specifically, the study determined the:

1. Administrative supervisors' assessment of the level of database management competencies possessed by their OTM graduate workers in polytechnics in North-east Nigeria.
2. Administrative supervisors' assessment of the level of webpage design competencies possessed by their OTM graduate workers in polytechnics in North-West Nigeria.

Research Questions

The following research questions guided the study:

1. What is administrative supervisors' assessment of the level of database management competencies possessed by their OTM graduate workers in polytechnics in North-West Nigeria?
2. What is administrative supervisors' assessment of webpage design competencies possessed by OTM graduate workers in Polytechnics in North-West Nigeria?

Null Hypotheses

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

1. Male and female administrative supervisors in polytechnics in North-West Nigeria do not differ significantly in their mean ratings on the level of database management competencies possessed by OTM graduate workers.
2. Administrative supervisors in federal and state polytechnics in North-West Nigeria do not differ significantly in their mean ratings on the level of database management competencies possessed by OTM graduate workers.
3. Male and female administrative supervisors in polytechnics in North-West Nigeria do not differ significantly in their mean ratings on the level of webpage design competencies possessed by OTM graduate workers.
4. Administrative supervisors in federal and state polytechnics in North-West Nigeria do not differ significantly in their mean ratings on the level of

webpage design competencies possessed by OTM graduate workers.

Method

Descriptive survey research design was used for the study. The area of the study was North-West Nigeria consisting of seven states namely; Kano, Katsina, Kaduna, Kebbi, Jigawa, Sokoto and Zamfara States. Population of the study was 378 administrative supervisors (Rectors, Registrars, Directors, senior administrative officers, Co-coordinators and Heads of Departments and Units) in all the 10 polytechnics in the area. The entire population constituted the sample. Instrument for data collection was a five-point rating scale questionnaire titled “Administrative supervisors’ assessment of OTM graduates’ database management and webpage design competencies Questionnaire (ASAOTMGDMWDCQ)”. The instrument has two clusters with 18 items each with options of very much possessed (VMP), much possessed (MP), moderately possessed (MP2), little possessed (LP) and very little possessed (VLP). The instrument was validated by three experts; two in business education and one in measurement and evaluation from Faculty of Education, NnamdiAzikiwe University, Awka. Split half method was used to determine the reliability of the instrument with Pearson Product Moment Correlation and a reliability co-efficient value of 0.81 was obtained. The researchers personally administered the instrument with the help of three research assistants who work in the polytechnics. Out of the 378 copies of the instrument distributed, 325 (representing 86%) were retrieved and used for the study. Data collected were analyzed using mean and standard deviation to answer the research questions and determine the closeness of the respondents’ mean ratings. Decision on the research questions was based on the cluster/grand mean scores relative to the real limits of numbers on a five-point scale. The inferential statistic of t-test was used to test the null hypotheses at 0.05 level of significance. A null hypothesis was accepted when the p-value is equal or greater than the alpha level of 0.05 and rejected when the p-value is less than the alpha level. The analysis was done with the Statistical Package for Social Sciences (SPSS) version 16.

Results

Table 1: Respondents' mean ratings on the level of database management competencies possessed by OTM graduate workers in North-West Nigeria Polytechnics

S/N	Database management competencies	\bar{x}	SD	Remarks
Ability to:				
1	Create data with database view	3.14	1.41	Moderately Possessed
2	Create records with design sheet view	3.11	1.46	Moderately Possessed
3	Work with table templates	3.08	1.48	Moderately Possessed
4	Create form with design view	3.56	1.39	Much Possessed
5	Create form with form wizard	3.48	1.42	Moderately Possessed
6	Create report in design view	3.46	1.40	Moderately Possessed
7	Create report in reporting wizard	3.18	1.36	Moderately Possessed
8	Manipulate query wizard	3.24	1.44	Moderately Possessed
9	Create query with design view	3.31	1.39	Moderately Possessed
10	Import data from excel	3.61	1.42	Much Possessed
11	Get data from hypertext markup language document	3.35	1.33	Moderately Possessed
12	Create data base email	3.20	1.32	Moderately Possessed
13	Migrate data into SharePoint	3.11	1.46	Moderately Possessed
14	Migrating data into structural query language server	3.15	1.40	Moderately Possessed
15	Relate data from different field	3.31	1.39	Moderately Possessed
16	Manage visual basic editor	3.37	1.38	Moderately Possessed
17	Sort data in sequence	3.21	1.32	Moderately Possessed

18	Maintain data security	3.44	1.40	Possessed Moderately Possessed
	Grand mean	2.57		Moderately Possessed

Table 1 shows that the OTM graduate workers much possessed only two of the listed database management competencies with mean ratings of 3.56 and 3.61. The remaining 16 competencies with mean ratings ranging from 3.08 to 3.46 indicates that the graduate workers moderately possessed them. The grand mean score of 2.57 shows that OTM graduate workers in North West Nigeria Polytechnics moderately possessed database management competencies. Standard deviations for all the items are within the same range which mean that the respondents are homogenous in their views.

Table 2: Respondents' mean ratings on the level of webpage design competencies possessed by OTM graduate workers in North-West Nigeria Polytechnics

S/N	Webpage design competencies	\bar{X}	SD	Remark
	Ability to:			
1	Create web page with note page	2.28	1.58	Little Possessed
2	Create text box to input text	2.05	1.51	Little Possessed
3	Apply background color to a page	2.17	1.49	Little Possessed
4	Apply image to a page	2.11	1.42	Little Possessed
5	Insert pictures on web page	2.10	1.41	Little Possessed
6	Use of font tag to apply different font	2.02	1.33	Little Possessed
7	Use paragraph tag to a page	2.01	1.38	Little Possessed
8	Use space tag to insert space on a page	2.00	1.36	Little Possessed
9	Create hyperlink on web page	1.91	1.29	Little Possessed
10	Publish web page	2.01	1.35	Little Possessed
11	Use marquee tag to a page	2.00	1.34	Little Possessed
12	Use horizontal rule tag	1.98	1.30	Little Possessed
13	Use symbol tag to insert symbol	2.01	1.35	Little Possessed
14	Apply different parameters	2.03	1.35	Little Possessed
15	Apply password tag	2.23	1.49	Little Possessed
16	Use radio button tag	2.12	1.43	Little Possessed
17	Use check box tag	2.68	1.46	Moderately Possessed
18	Use text area tag to a web page	2.66	1.45	Moderately Possessed
	Mean of means	2.14		Little Possessed

Table 2 reveals that OTM graduate workers in North-West Nigerian polytechnics moderately possessed only two out of the 18 webpage design competencies with mean scores of 2.68 and 2.66 and little possessed the remaining

16 with mean ratings ranging from 2.21 to 1.91. The grand mean score of 2.14 shows that the level of webpage design competencies possessed by the OTM graduate workers is little. Standard deviations for all the items are within the same range showing the closeness of the respondents' responses.

Table 3: The t-Test analysis of male and female respondents' mean ratings on database management competencies possessed by OTM graduate workers in North-West Nigeria Polytechnics.

Group	N	\bar{X}	SD	df	Standard Error	t-cal	P-value	α	Decision
Male	217	3.01	1.32	323	0.07	-0.14	0.00	0.05	Significant
Female	108	2.83	1.40						

Table 3 reveals that the calculated t-value is -0.14 at 323 degree of freedom with p-value of 0.00 which is less than the alpha level of 0.05. This shows that male and female respondents differed significantly in their mean ratings on level of database management competencies possessed by OTM graduate workers in North-West Nigeria polytechnics. Therefore, the null hypothesis was rejected.

Table 4: The t-test analysis of mean ratings between respondents' from federal and state owned polytechnics in North-West Nigeria Polytechnics on database management competencies possessed by OTM graduate workers

Group	N	\bar{X}	SD	df	Standard Error	t-cal	P-value	α	Decision
Federal	217	2.32	0.85	323	0.07	-0.30	0.00	0.05	Significant
State	108	2.93	1.38						

Table 4 shows that the calculated t-value is -0.30 at 323 degree of freedom and a p-value of 0.00 which is less than the alpha level of 0.05. This means that institution ownership significantly influenced the respondents' mean ratings on the level of database management competencies possessed by OTM graduate workers in North-West Nigeria polytechnics. The hypothesis was, therefore, rejected.

Table 5: The t-test analysis of Male and female respondents' mean ratings on web page design competencies possessed by OTM graduate workers in North-West Nigeria Polytechnics.

Group	N	\bar{X}	SD	df	Standard Error	t-cal	P-value	α	Decision
Male	217	2.31	1.26						Not

				323	0.07	-0.11	0.05	0.05	significant
Female	108	2.31	1.30						

Table 5 shows that the calculated t-value is 0.1 at 323 degree of freedom with p-value of 0.04 which is equal to the alpha level of 0.05. This implies that male and female administrative supervisors in polytechnics in North-West Nigeria do not differ significantly in their mean ratings on webpage design competencies possessed by OTM graduate workers. The hypothesis was, therefore, not rejected.

Table 6: The t-test analysis of mean ratings between respondents' from federal and state owned polytechnics in North-West Nigeria Polytechnics on webpage design competencies possessed by OTM graduate workers.

Group	N	\bar{X}	SD	df	Standard Error	t-cal	P-value	α	Decision
Federal	217	2.31	1.26						Not significant
				323	0.07	-0.11	0.05	0.05	
State	108	2.31	1.30						

Table 6 shows that calculated t-value is 0.05 at 323 degree of freedom with p-value of 0.05 which is equal to alpha level of 0.05. This means that administrative supervisors in federal and state-owned polytechnics in North-West Nigeria did not differ significantly in their mean ratings on webpage design competencies possessed by their OTM graduate workers. The hypothesis was, therefore, not rejected.

Discussion

Findings of the study showed that OTM graduates workers in polytechnics in North-West Nigeria moderately possessed database management competencies.. This finding tallies with Garba (2012) which reported that OTM students in North-West Nigeria polytechnics were fairly proficient in database management. The finding also supports the recommendation of Asuquo (2010) that OTM graduates need to possess database management skills for office work and self-reliance. The result could be as a result of lecturers' competency in teaching the application which will obviously affect the students both during training and in the workplace on graduation. Moreover, the OTM graduates' may not be adequately motivated to pursue private training in order to improve their level of competency in using the application if they do not frequently utilize them in their duty performance in the polytechnics.

The study also found that gender and institution ownership significantly influenced the mean ratings of administrative supervisors on database management competencies possessed by OTM graduate workers. This finding agreed with

Oguejiofor and Umeh (2016) who reported that there was a significant difference in the mean responses of secretaries in Anambra State civil service on their database management competencies based on the size of the organization. However, the finding contradicts Garba (2012) which reported that male and female OTM students in North-West Nigerian polytechnics do not differ significantly in their mean ratings on their proficiency in database management.

Furthermore, findings of the study show that the level of webpage design competencies of OTM graduate workers in North-West Nigeria polytechnics was little. This finding agreed with Okoro and Ndinechi (2013) which reported that OTM lecturers were fairly competent in teaching webpage design which could negatively affect the graduates in employment. The reason for this could be that lecturers' exposure to the application was minimal, hence their incompetence will be reflected in their products. It could also be due to the graduates' lack of enthusiasm in training on the application while in school which could be why Ezenwafor and Onokpaunu (2016) recommended that for the graduates of business education programme (which includes OTM) to acquire the requisite competencies in webpage design such graduates should possess personal computers and engage in self-sponsored training.

The findings revealed no significant difference in the administrative supervisors' ratings of OTM graduates' competencies in webpage design as result of gender and ownership of the institution. This finding supported Ezenwafor and Onokpaunu (2016) which reported that male and female respondents in universities and colleges of educations in Delta State do not differ significantly in their mean ratings on the extent to which they apply web-based instructional technologies in teaching. The finding contradicted the report of Okoro and Ndinechi (2013) that there is significant difference between business educators with teaching qualifications and their counterparts without teaching qualifications on the level of competence on webpage design.

Conclusion

Based on the findings of this study, it was concluded that OTM graduate workers in North-West Nigeria Polytechnics do not possess relevant competencies for effective utilization of database management and webpage design applications.

Recommendations

Based on the findings of the study, the following recommendations were made.

1. OTM graduate workers in North-West Nigeria polytechnics should engage in self-sponsored in-service training programmes to improve their competencies in database management and webpage design applications to enhance their work performance.

2. Administrative supervisors in North-West Nigeria polytechnic should recommend approval of sponsored in-service training for their OTM graduate workers to enhance their computer application competencies.
3. Management of the institutions covered in the study should ensure that ICT resources are available and functional in the OTM department for use by lecturers, students and graduate workers.
4. Employers of OTM graduates outside the polytechnics should motivate their employees to improve on their computer application competencies by providing the resources and sponsoring them for in-service training programmes.

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EFFECT OF COMPUTER ASSISTED INSTRUCTION ON THE RETENTION ABILITY OF TECHNICAL COLLEGE STUDENTS IN ELECTRICAL INSTALLATION AND MAINTENANCE WORK IN ENUGU STATE

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Abstract

This study investigated effect of Computer Assisted Instruction on the retention ability of technical college students in Electrical Installation and Maintenance Work in Enugu State. A research question and a null hypothesis guided the study. Quasi experimental research design was adopted for the study. The sample used for the study consisted of 22 NTC II students made up of 14 males and 8 females. Purposive sampling technique was used to select two schools from Udi and Enugu education zones. An intact class was used in each of the schools which were tagged experimental and control group respectively. The instrument used for data collection was a 50 objective questions developed by the researcher which was administered as pre-test, post-test and delayed post-test to the experimental and control groups respectively. Pearson correlation coefficient formula was used to establish the reliability of the instrument which yielded 0.81 coefficient reliability. The research question was answered using mean scores whereas the hypothesis was analyzed using ANCOVA. The mean scores and ANCOVA were calculated using SPSS version 20. The findings showed that CAI significantly increased the students' retention ability. In view of the finding, it was recommended among others that CAI should be formally adopted in technical colleges, secondary and vocational schools for instruction in Electrical Installation and Maintenance Work to improve retention ability of students.

Keywords: Computer assisted instruction, Retention ability, Electrical Installation and Maintenance Work.

Introduction

Electricity is indispensable in the development of a nation. It has long become one of the basic needs of humanity. In spite of this, the state of electricity in Nigeria is deplorable. This is to say that electricity in Nigeria is unreliable and not dependable. The result has been a gross retardation of development in various sectors in Nigeria. Sambo, Garba, Zarma and Gaji (2010) in agreement to this, observed that development in various sectors in Nigeria has been grossly retarded

due to the epileptic situation of electric power supply. This undesirable state of power in Nigeria is due to lack of qualified manpower and poor maintenance planning (Emovon, Kareem & Adeyeri, 2010). This therefore implicates the need for trained workforce with requisite skills in the power sector in order to arrest this epileptic state of electricity in Nigeria. In line with this, Daso (2012) and Sylvester (2013) opined that the technical needs of the Nigerian society are competent auto mechanics and truck drivers, carpenters, plumbers, electricians (to maintain Nigeria's power plants), computer database technicians and web/network technicians, medical technicians and vocational nurses.

Among these needs, the crux is the need for electricians or technologists that can handle the sorry state of electricity in Nigeria. Several institutions including technical colleges in Nigeria are annually turning out graduates from courses like Electrical Engineering and Technology, Electrical Technology, and many other related courses. The graduates from these institutions are usually engineers, technologists, technicians, electricians, artisans or craftsmen that increase in number every year. Despite the increasing number of these categories of professionals, the condition of the power sector keeps deteriorating. The assumption is that quality of these graduates who are sent out to the labour market annually is also deteriorating. It is because many of these graduates are trained in skills that are no more sellable in the job market because they are already obsolete. Many others too are not adequately trained for the job. This is simply as a result of the inability of the training institutions to comply with the popular vocational education theory which says that the training environment should be the same or favourably compared with the environment the trainee will work upon completion of his training (Prosser & Allen, 1925). It is therefore necessary to examine the process that produces the manpower responsible for the power sector such as the teaching of electrical installation from the grassroots (college level).

Adequate knowledge of Electrical Installation and Maintenance Work (EIAMW) is pertinent for competent electrical/electronic engineers, technologists, technicians, electricians, craftsmen and artisans. EIAMW is one of the trade subjects offered mainly in technical colleges in Nigeria that has its major objective as to provide trained manpower in the applied science, technology and commerce at sub-professional grades (Federal Republic of Nigeria, 2014). Despite the importance of EIAMW in making robust human infrastructure to address the perils in the power sector and other related sectors, the trade has suffered gross negligence and relegation by the Nigerian society. This is revealed by its absence in so many technical colleges in Nigeria. In Enugu State for instance, only 3 out of the 21 technical colleges registered students for EIAMW in NABTEB examination within the year 2011 and 2013 (Science Technical and Vocational Schools Management Board, Enugu, 2014). Even so, it has been observed that the few students that offer EIAMW in NABTEB perform poorly in it. For instance, an analysis of the May/June results of National Business and Technical Education

Board (NABTEB) examination from year 2006 to 2010 by Olatunde, the then NABTEB registrar/chief executive, revealed that students performed poorly in EIAMW across the nation and Enugu State in particular. Consequently, this is due to poor retention ability. Also, a review of the performance of students in EIAMW subject in the NABTEB examination in Enugu State from year 2011 to 2013 revealed that students' performance in the subject is unsatisfactory. This has been a subject of concern to the technical educators in a manner that relates the students' poor performance in EIAMW to the teaching methods used.

Several studies show that teaching methods have significant relationship with retention ability of students. For instance, Anyamene, Nwokolo, Anyachebelu and Anemelu, (2012) found that senior secondary school students taught Mathematics using CAI performed significantly better in retention test than those taught same using conventional method. When a concept is taught with a teaching method suited for it, learning increases whereas wrong method of instruction yields poor performance of the learner. That is to say that no teaching method is wrong in itself but every career area has teaching methods that are best suited for instruction. Prominent among the teaching methods used in teaching EIAMW are demonstration and lecture methods. In view of the dynamic and innovative trends in science and technology and consequent curricula review, these methods are not sufficient enough to ensure meaningful learning of EIAMW (Auwal, 2013). Therefore, teaching methods that are more pedagogical with respect to EIAMW in this era of Information and Communication Technology (ICT) are needed. The danger of insisting on these age-long conventional methods is of twofold: firstly, continued insistence on utilizing these methods for instruction may perpetuate the poor performance of students in EIAMW. Secondly, the trainees will be practically unfit in the world of work as a result of technological innovations which conventional method is deficient to handle. The question now is "how can effective teaching of EIAMW be achieved in view of the dynamic technological advancement of this era?"

Computer Assisted Instruction (CAI) may be of great help in answering the question and also in circumventing this problem. In recent times, computer (information and communication technology) has been increasingly utilized as an instructional tool in the classroom. The use of computer in the classroom has culminated to CAI. CAI is simply the use of computer for instruction. It's either used as a tutor or as an aid. CAI encourages individualized instruction and aids learners to learn at their pace. It also saves time, enhances motivation, gives feedback and is highly learner centred. According to Chika (2008), the quality of learning and teaching can be significantly improved when ICT is utilized as an intellectual multi-tool.

Several researches have shown that the use of CAI for instruction in certain career areas has significant positive effect on students' retention ability compared to the conventional methods. For instance, Anyamene, Nwokolo, Anyachebelu

and Anemelu (2012) in mathematics and Safo, Ezenwa and Wushishi (2013) in geometry. They all confirmed that CAI is more effective in enhancing retention ability in these career fields compared to the conventional classroom instruction. The use of software such as CAI makes it possible that concepts are presented to the students in such an organized manner that makes for greater clarity and easier comprehension (Anyamene et al, 2012). On this basis, this study was designed to investigate effect of computer-assisted instruction on the retention ability of students in Electrical Installation and Maintenance Work in technical colleges. In this understanding, a research question was posed and hypothesis formulated.

Research Question

What is the difference in the retention ability of students taught EIAMW with CAI and those taught with lecture teaching method as determined by their mean retention scores?

Hypothesis

There is no significant difference between the retention ability of students taught EIAMW with CAI and those taught using lecture method of instruction with reference to their mean retention scores.

Methodology

Quasi experimental research design consisting of non-equivalent control group and experimental group was adopted for this study. Quasi experimental research design was used for this study because there was no random assignment of the subjects to treatment conditions. Nworgu (2015) agreed that in a situation where there is no randomization in the assignment of individual participants to treatment conditions, quasi experimental method is most suitable.

The population of the study consisted of four hundred (400) NTC II students (347 males and 53 females) in the twenty one technical colleges in Enugu State. The sample consisted of 22 (14 males and 8 females) students who were purposively selected from the two colleges. Fifteen students (9 males and 6 females) were selected from Udi Technical College in Udi education zone to form the experimental group while seven students (5 males and 2 females) from Technical College Akpuoga Nike in Enugu education zone served as control group. Intact class was used in each of the schools (Udi Technical College and Technical College Akpuoga Nike).

The instrument used for data collection was Electrical Installation and Maintenance Work Retention Test titled EIAMWRT which was developed by the researcher. The second term scheme of work for technical colleges was used. The fifty item multiple choice objective test that made up the EIAMWRT were validated and its reliability determined using Pearson correlation coefficient formula yielded 0.81 coefficient reliability.

The duration of the study was eight weeks. The first week was used for pre-test administration, four weeks for teaching the EIAMW content and the sixth week for post-test administration. Two weeks after the post-test administration, a delayed post-test was administered to ascertain retention ability of the students. The scores obtained from the delayed post-test was the retention scores. The research question was answered using mean and hypothesis was analyzed using Analysis of Covariance (ANCOVA) at 0.05 level of significance.

Results

Research Question: What is the difference in the retention ability of students taught EIAMW with CAI and those taught with lecture teaching method as determined by their Retention mean scores?

Table 1: Means and Standard Deviations of retention test scores of experimental and control group

Source of Variance	N	Retention mean	SD
Experimental group	15	40.60	2.971
Control group	7	28.00	4.967
Mean difference		12.60	

Table 1 reveals that the experimental group with retention mean of 40.60 retained EIAMW concepts taught more than the control group with 28.00 retention mean. Hence, with the mean retention difference of 12.60 between the experimental and control group, CAI is more effective in enhancing retention ability of students in EIAMW than lecture method of instruction.

Hypothesis: There is no significant difference between the retention ability of students taught EIAMW using CAI and those taught using lecture method of instruction with reference to their retention mean scores.

Table 2: ANCOVA on mean retention scores of students taught EIAMW using CAI and those taught using lecture method

Source	Type III Sum of Squares	df	Mean Square	F-cal	F-crit	Sig.
Corrected Model	3.513 ^a	1	3.513	55.797		.000
Intercept	8.872	1	8.872	140.898		.000
Groups	3.513	1	3.513	55.797	4.35	.000
Error	1.259	20	.063			
Total	43.000	22				
Corrected Total	4.773	21				

Significant at 0.05 alpha level; df= 1& 20; critical $p \geq 0.000$

In Table 2, data presented show that the calculated F-value of 55.797 is due to the difference in retention ability between students in the experimental and control groups. The F-calculated value of 55.797 is greater than 4.35 F-critical value. Also, the p-value ($p \geq 0.000$), is less than 0.05 alpha level. Hence, at 1 and 20 degree of freedom and 0.05 alpha level of significance, H_0 was rejected. The implication of this is that there is significant difference in retention ability between the students taught EIAMW using CAI and those taught using lecture method.

Discussion of Results

Tables 1 and 2 indicate effect of CAI on the retention ability of students in EIAMW. The findings revealed that there was a significant difference in the retention test scores between the experimental and control groups in favour of the experimental group. In specific terms, Table 1 shows that the experimental group had mean retention scores of 40.60 and the control group 28.00 mean retention scores. This shows that students in the control group retained EIAMW concepts taught more than those in the control group. Table 2 indicated that this difference is significant hence cannot be attributed to chance.

These findings agreed with the findings of some related empirical literatures reviewed on effect of CAI on retention ability of students in EIAMW. For instance, Anyamene et al (2012) found that senior secondary school students taught Mathematics using CAI performed significantly better in retention test than those taught same using conventional method. Also, Safo et al (2013) found that the mean retention scores of the students taught geometry using CAI Packages significantly differed from that of the students taught using traditional teaching method in favour of the CAIP group.

The significant improvement in retention ability of students exposed to CAI method of instruction as found in this study could be attributed to certain features of CAI such as individualization of instruction. Also, CAI creates multi-sensory channels for learning thereby increasing students' participation in the learning process. Therefore, CAI creates platforms for students' active participation in the learning process rather than being mere recipients hence increasing their retention ability.

Conclusion

Based on the finding of this study, CAI is an innovative and effective mode of instruction with the capacity of improving students' retention ability in EIAMW.

Recommendations

The following recommendations were proffered based on the finding of this study.

1. CAI should be formally adopted in technical colleges, secondary and vocational schools for instruction in EIAMW to improve retention ability of students.

2. Teachers should ensure constant and effective utilization of CAI for instruction in trade and trade related subjects/courses.
3. Training programmes on effective utilization of CAI for instruction should be organized periodically for teachers.
4. The schools should be provided with computers and internet facilities to enable students maximise the benefits of CAI.
5. Training on the development of different CAI software specifically for teaching trade subjects should be organized for indigenous computer programmers as one can hardly find locally produced CAI software. These trainings should suffice curricula reviews.

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PERCEIVED EFFECTIVE WAYS FOR INTEGRATION OF BUSINESS ETHICS COURSES IN BUSINESS EDUCATION CURRICULUM IN TERTIARY INSTITUTIONS IN SOUTH-EAST NIGERIA

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Abstract

The study ascertained the effective ways for integration of business ethics courses into the business education curriculum as a strategy for training students for improved performance in business organization, in the perception of business educators in tertiary institutions in South-East Nigeria. Descriptive survey research design was adopted for the study. The population of the study comprised 144 business educators in tertiary institutions in the South East, Nigeria. One research question guided the study and one hypothesis was tested at 0.05 level of significance. A nine item questionnaire was used for data collection. The questionnaire was tested for validity and the instrument determined for internal consistency using Cronbach alpha, which yielded a score of 0.74. The data collected were analysed using mean score, standard deviation and Analysis of Variance (ANOVA). The mean ratings were used to answer the research question while standard deviation was used to determine the closeness of the respondents' means. Analysis of Variance was used in testing the null hypothesis at 0.05 level of significance. Findings revealed among others, providing foundational ethics courses in business education and discussing case studies in ethics in business education classes as effective ways of integration of business ethics courses in business education curriculum in tertiary institutions and a strategy for training students for improved performance in business organizations. Furthermore, the findings revealed that years of teaching experience of the respondents did not significantly influence their mean ratings on the effective ways of integration of business ethics courses in the business education curriculum, as a strategy for training students for improved performance in business organizations. It was recommended among others, that administrators of business education programme in tertiary institutions should apply the effective ways discovered in this study to integrate business ethics courses in business education curriculum for training of students and for improved performance of her graduates in business organisations. This will enable students to be theoretically and practically equipped for the labour market and the demands of the real world.

Keywords: Integration, Business Ethics, Courses, Strategy, Effective, Training, Improved, Performance, Business Organizations

Introduction

The high rate of unemployment amongst graduates of tertiary institutions in Nigeria has increased the call for curriculum planners and management of tertiary education to seek effective strategies that will be used to train undergraduates for the world of work. Tertiary education is the education given after post basic education. This level of education according to Aluede, Aluede and Ufah, (2004), has been identified as the process that helps develop the whole man physically, mentally, morally and technologically, to enable one function effectively in any environment in which one finds oneself so as to become more productive, self-fulfilling and self-reliant. Idogho (2011) and Federal Government of Nigeria (2013) further noted that the goals of tertiary education in Nigeria include, to contribute to national development through high level manpower training; to provide accessible and affordable quality learning opportunities through formal and non-formal education in response to the needs and interests of all Nigerians; to promote and encourage scholarship, entrepreneurship and community service and to reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market among others. The above goals as enunciated by the Federal Government of Nigeria on her national policy on education are laudable enough for consideration and utilization by educational managers for the purpose of improving and sustaining Nigerian educational system which the business education programme is an integral part.

Business education is an aspect of the vocational education programme offered at the tertiary level of education which prepares students for careers in business. Business education is the education that prepares individual for business competencies necessary for teaching business attitudes, concepts, skills and knowledge. Similarly, Chukwurah (2007) defined business education as an aspect of educational training process which business teacher-trainees receive with the primary motive of enabling them acquire adequate attitudes, concepts, knowledge, understanding and skills in business activities. It is also an aspect of educational training received for personal or vocational usage, and/or for careers as administrators, managers and teachers wherever they may find themselves in the business world. According to the American Vocational Association, in Okoro (2013), business education programme is a broad and comprehensive discipline whose instructional programme encompasses knowledge, skills, vocation and aptitude needed by all citizens in order to effectively manage their personal businesses and also function in the economic system. Business education students are therefore expected to possess relevant skills, competencies and knowledge in major aspects of business.

Business educators are professionals with various level of working experiences. In this light Jimoh-Kadiri (2012) averred that these characteristics could also affect their abilities to perform their duties optimally. However, Oduma and Ndinechi (2007) stated that business educators are essential to the training and development of competent business education graduates. Uzodi (2012) opined that business education is value-oriented education. Business education has the potential of equipping the students for entrepreneurship, white collar jobs and turning out creative graduates who can fend for themselves all through their lives (Okoli & Ibeh, 2017; Oduma and Ndinechi, 2007).

However, it appears that despite the laudable expectations of what can be achieved through the study of business education, the business education programme in tertiary institution may have failed to meet its stated goals. This is evident in the views of Essia (2012) and Obiete, Nwazor and Vin-Mbah (2015) who decried the apparent failure of education offered in tertiary institutions especially in the business education programmes, in preparation of students and graduates for real life situations and corporate leadership. Elucidating further, Lioyde and Tokunbo (2002) observed that the cause of increased rate of unemployment amongst university graduates in Nigeria is manifested in lack of functional education that could equip graduates for creativity and innovativeness. These views are accentuated by the increasing rate of unemployment among graduates in Nigeria, business education programmes inclusive who have failed to gain employment in companies in the business sector of the country due to inadequate employability skills and attitudes acquired (Okoli and Ibeh, (2017). Ohiwerei (2009) specifically noted that the inability of business education graduates to gain employment in various corporate bodies and organizations resulted from incompetence. This incompetence is traceable to shortages of business education teachers, lack of maintenance of equipment, inaccessibility of teaching facilities, low teachers and students interest, inadequate textbooks and workbooks and other business teaching materials and Nigerian higher institution graduate certificate centred mentality. Ohiwerei further alluded that the over-bearing emphasis placed on paper qualification is the reason for the mismatch between the quality of business education graduates and their employability in the real world of business.

The situation is not helped by the lack of faith of most business organizations especially the banking sector who employ Nigerian graduates from tertiary institutions abroad (Sokunbi, 2006). Obiete, Nwazor and Vin-Mbah (2015) posited that the reason why graduates from business education programmes are unable to get jobs in corporate organization is because the graduates lack the requisite corporate skills to function in the corporate environment. Obiete et al concluded that business education students and graduates alike lacked training in corporate governance and this has hindered their ability to get employment. The authors averred that even when the graduates get jobs in corporate organizations;

their lack of training in specific aspects of corporate governance hindered their rise on the corporate ladder.

Obiete et al (2015) noted that corporate governance ensures that the board of directors is accountable for the pursuit of business objectives and the business itself conforms to the laws and regulations. Corporate governance refers to the collection of activities that executives make the best decision for shareholder profitability (Fryer, 2014). Robertson & Athanassiou (2009) viewed ethics as one of the most important issues in corporate governance and most publication and researches that focused on business ethics and corporate governance revealed that the main thematic clusters within these researches are ethical judgment analyses, violation of laws and regulations, national moral environment and corporate governance.

Neubaum, Pagell, Drexler, McKee-Ryan and Larson (2009) averred that ethics can be taught, and that educational programmes that integrate the study of ethical theory with its practical application can be highly effective. In consonance, Cavico and Mujtaba (2009) opined that if the society is concerned about the behaviour of its business people, then it is quite appropriate that a business ethics course becomes a required course in school curriculum.

Experience is an essential variable in education. Obodo in Uzodi (2012) observed that experience of an educator is a very significant factor in the teaching and learning of a course. Similarly, Jimoh-Kadiri (2012) stated that some strategies are better used based on an educators' experiences and competences. The author further asserted that less experienced educators (who have taught for less than six years) may not be competent enough in the use of some teaching strategies. However, the effective ways of integrating business ethics in business education curriculum are not well known, hence the need for the study. It is against this background that the researcher intends to empirically ascertain in the perception of business educators in tertiary institutions in South-East States of Nigeria the effective ways of integration of business ethics courses in business education curriculum, as a strategy for training students for improved performance in business organizations.

Statement of the Problem

In recent times, the rate of unemployment among youths in Nigeria has become alarming as graduates roam the streets without jobs. This calls for great concern among the employers of labour, government and educational institutions who are not meeting up with their programme objectives, business education inclusive. Unfortunately, the training given to students while in school and which is expected to equip them adequately for the world of work and to become self-employed is in greater part theoretically based.

The researchers observed that the training programmes in the country at the tertiary levels have concentrated more on teaching knowledge and skills in

principles devoid of practical experiences in related fields. This is as result of lack of prerequisite corporate skills amongst business teachers and educators. This situation has resulted in the production of graduates who cannot demonstrate the required corporate skills needed to function effectively in business organizations. This poor state of art prompted the search for effective ways in the integration of business ethics courses in the business education curriculum for the training of the undergraduates for improved performance in business organizations.

The strategy seems not to be known or embraced by business educators in tertiary institutions in South East, Nigeria. The problem of this study therefore is to ascertain in the ratings of business educators in tertiary institutions in South East, Nigeria, the effective ways of integration of business ethics courses in the business education curriculum as a strategy to train students for improved performance in business organizations.

Purpose of the Study

The main purpose of the study is to determine effective ways of integration of business ethics courses in the business education curriculum as a strategy for training students for improved performance in business organizations, in the ratings of business educators in tertiary institutions in South East, Nigeria.

Research Question

What is the rating of business educators in tertiary institutions in South East, Nigeria on the effective ways of integration of business ethics courses in the business education curriculum as a strategy for training students for improved performance in business organizations?

Hypothesis

Business educators in tertiary institutions in South East, Nigeria do not differ significantly in their ratings on the effective ways of integration of business ethics courses in the business education curriculum as a strategy for training students for improved performance in business organizations based on teaching experience (0-5years, 6-10years and Above 10years).

Method

The research design adopted in this study was descriptive survey. The study was carried out in the South east, Nigeria. The population of the study comprised 144 business educators from 13 public and private tertiary institutions offering business education in the zone. The instrument for data collection was a validated structured questionnaire developed by the researchers. The instrument was titled: Effective Ways of Integration of Business Ethics Courses as Strategy for Training Students for Improved Performance in Business Organizations Questionnaire(EWIBECSTSIPBOQ). It has two main sections – A and B. Section

A contains one item on respondents' background information covering years of teaching experience; while section B contains eight items on effective ways for integration of business ethics courses in business education curriculum as training strategies. Section B was structured on a 5- point rating scale of Very Effective (VE), Effective (E), Moderately Effective (ME), Ineffective (IE) and Very Ineffective (VIE). Cronbach Alpha was used to determine the internal consistency of the instrument. A value of 0.74 was obtained and was deemed reliable for the study. Out of the 144 copies of the questionnaire administered, 128 copies were returned, given a return rate of 89 percent and used for data analysis. Data collected from the respondents were analyzed using descriptive of mean and standard deviation. The mean value was used to answer the research questions while the standard deviation was used to ascertain the homogeneity or otherwise of the closeness of the respondents' ratings. The decision rule was based on the real limit of numbers on the 5-point rating scale as shown below:

Response option	Values	Real Limit
Very Effective	5	4.50-5.00
Effective	4	3.50-4.49
Moderately Effective	3	2.50-3.49
Ineffective	2	1.50-2.49
Very Ineffective	1	1.00 - 1.49

For the hypothesis, ANOVA was employed to test the null hypotheses at 0.05 level of significance. Where the calculated f value is less than the critical value of f, it means that there was no significant difference and the hypothesis was not rejected. Conversely, where the calculated f value is equal to or greater than the critical f value, it means that there was a significant difference and the hypothesis was rejected.

Results

The results of the study are contained in tables 1 and 2

Research Question: What is the rating of business educators in tertiary institutions in South East, Nigeria on the effective ways of integration of business ethics courses in the business education curriculum as a strategy for training students for improved performance in business organizations?

Table 1: Respondents Mean Ratings on Integration of Business Ethics Courses in the Business Education Curriculum as an Effective Strategy for Training Students (N=128)

S/N	Business ethics knowledge strategies	Mean	SD	Remarks
1	Providing foundational ethics courses in business education.	3.53	0.71	E
2	Discussing case studies in ethics in business education classes.	3.67	0.76	E
3	Instituting business ethics competition among business education students.	3.55	0.81	E
4	Facilitating business education students' discussions with white collar defaulters.	3.05	0.61	ME
5	Supporting the development and growth of students programs focused on ethics-related issues, such as Net Impact.	4.21	0.93	E
6	Engaging students in ethics based service learning for instance involving students in providing free business consultancy to local business owners in their community.	3.70	0.84	E
7	Inviting guest lecturers to talk to students on business ethics	3.68	0.74	E
8	Instituting departmental ethics in transactions in the business education programme.	3.04	0.60	ME
9	Encouraging new ethical understandings of business; including greater perspective of who is affected by corporate activities decisions.	3.50	0.70	E
	Cluster	3.55		E

Note. E = effective, ME = moderately effective

Data in Table 1 reveal that the respondents rated seven items (1, 2, 3, 5, 6, 7 and 9) as effective with mean ratings ranging from 3.04 to 3.67 and standard deviations ranging between 0.61 to 0.93. They also rated items 4 and 8 as moderately effective with mean ratings of 3.05 and 3.04 and standard deviations of 0.61 and 0.60 respectively. The cluster mean of 3.55 indicates that business educators in South East, Nigeria considered integration of business ethics courses in the business education curriculum as an effective strategy for training students for improved performance in business organizations. The standard deviations show that the respondents' opinions are closely related.

Hypothesis: Business educators in tertiary institutions in South East, Nigeria do not differ significantly in the extent they considered integration of business ethics courses in the business education curriculum as an effective strategy for training

students for improved performance in business organizations based on experience (0-5years, 6-10years and Above 10years).

Table 2: Summary of ANOVA of the mean ratings of respondents on the extent they considered integration of business ethics courses in the business education curriculum as an effective strategy for training business students

Sources	Sum of Squares	df	Mean Square	F-ratio	F-crit.	Remark
Between groups	.192	2	.096	.111	3.09	NS
Within groups	240.091	126	.861			
Total	240.283	128				

Note. NS = not significant

Data in Table 2 reveal that F-ratio of 0.111 calculated at 0.05 level of significance and at 2 and 126 degrees of freedom is less than the F-critical value of 3.09. Since the F-ratio of 0.111 is less than the F-critical value of 3.09, the null hypothesis is not rejected. Thus, business educators in tertiary institutions in South East, Nigeria do not differ significantly on their ratings on effective ways of integration of business ethics courses in the business education curriculum as a strategy for training students for improved performance in business organizations based on teaching experience.

Discussion

The findings of the study indicated that business educators rated providing foundational ethics courses in business education, discussing case studies in ethics in business education classes, instituting business ethics competition among business education students, supporting the development and growth of students programs focused on ethics-related issues, such as net impact, engaging students in ethics based learning service such as involving students in providing free business consultancy to local business owners in their communi; Inviting guest lecturers to talk to students on business ethics and inviting guest lecturers to talk to students on business ethics as effective ways of integration of business ethics courses in the business education curriculum as a strategy for training students for improved performance in business organizations. Others as, instituting departmental ethics in transactions in the business education programme and facilitating business education students' discussions with white collar defaulters were rated as moderately effective ways. This findings is in line with that of Wong and Wong (2016) who reported that the integration of ethics courses helps to educate students on the expected behaviours in a corporate environment. According to Petcu and Dinu (2014), important goals of ethics education include building the skills, the confidence, the moral muscle, and the habit of voicing one's values. Helping students understand their own values and how to articulate them can give the students the courage to make decisions and take actions based on those values.

The findings also revealed that there was no significant difference in the mean ratings of business educators in South East States on the effectiveness of the integration of business ethics courses in the business education curriculum as a strategy for training students for improved performance in business organizations based on experience. This implies that the years of experience did not influence the opinions of business educators. This underscores the importance of teaching ethics courses as an important strategy for training business education students for improved performance in business organizations.

Conclusion

Based on the findings of the study, the researchers conclude that the integration of business ethics courses in the business education curriculum is an effective strategy for training business education students for improved performance in business organizations. It therefore becomes imperative that concerted effort be made by administrators of the business education programme and curriculum planners to map out more business ethics courses that will expose business education students to the value of business ethics in improving business performance.

Recommendations

Based on the findings of this study, the researcher proffers the following recommendations:

1. Administrators of business education programme in tertiary institutions should integrate business ethics courses in the business education curriculum. If this is done, it will enable students to be theoretically and practically equipped for the labour market and the demands of the real world.
2. Heads of reputable business organizations should be invited to educate business education students on business ethics and the importance of ethics to improved business performance.
3. Administrators of business education programmes should consistently organize seminars and workshops where business education students will be exposed to the various aspects of business ethics and their usefulness to business.

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APPRAISAL OF EMPLOYEE RECRUITMENT PRACTICES OF SMALL AND MEDIUM SCALE ENTERPRISES MANAGERS IN DELTA STATE FOR IMPROVED PERFORMANCE

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Abstract

The study appraised employee recruitment practices utilized by managers of small and medium scale enterprises (SMSEs) for improved performance in Delta State. One research question guided the study and two hypotheses were tested. Descriptive survey design was adopted for the study. The study was carried out in Delta State of Nigeria. The decision to use Delta State for the study is informed by the fact that the state has many SMSEs which are experiencing reduction in business size, slow expansion rate and even business failure. Population for the study consisted of 420 managers of SMSEs in the general business service sector operating in Delta State. The entire population was used in the study without sampling. A structured questionnaire comprising seven items which was validated by three experts in the field was used to collect data. Mean and standard deviation were used to answer the research question and determine the closeness of the respondents' mean while Analysis of Variance (ANOVA) and t-test were used in testing the null hypotheses at 0.05 level of significance. Findings revealed that managers of SMEs in Delta State utilize employee recruitment practices to a moderate extent. It was also revealed that years of business experience and gender of the respondents did not significantly influence their mean ratings. Based on these findings, it was recommended among others, that managers of SMSEs should make concerted efforts to improve their employee recruitment process and systems through purchase and reading of books and journals on employee recruitment practices. It was also recommended that the National Association for Small and Medium Scale Entrepreneurs (NASME) should organize conferences and workshops for her members in order to educate them on the importance of recruiting the right employees in their organization.

Introduction

Small and medium scale enterprises are business organizations set-up by individuals or group of individuals known as business operators for the main purpose of providing goods and services. Small and medium scale enterprises (SMEs) are important contributors to economic growth and development of any

nation. According to the Organisation for Economic Co-operation and Development (OECD, 2012), small and medium-sized enterprises account for 60 to 70 per cent of jobs and for a disproportionately large share of new jobs.

According to Abubakar and Abubakar (2015), SMEs constitute 90 to 95 percent of all enterprises worldwide and account for more than 70 percent of the products and services in the world. SMEs are seen also as key factors in employment and accounts for approximately 60 percent of private sector employment worldwide. Recent trends in Nigeriahave clearly revealed the amount of interest inSMEs by government, educational institutions andcorporate bodies. The development of SMEs hasbeen recognized as a veritable tool for promoting povertyeradication, job creation, rural development and sustainable livelihood for the populace. Delta State is a state where a large percentage of citizens are entrepreneurs or owners of SMEs. The presence of small and medium scale enterprises has increased economic activities in the state and has helped to improve her revenue base.

Classification of the enterprises into small and medium enterprises depends on the scale or size of business the operators control. These enterprises engage in different types of activities ranging from construction, agro-allied, information technology, manufacturing, educational establishment, business services, tourism and leisure. SMEs abound in Nigeria and Delta State in particular due to factors which include availability of natural resources, large markets and abundant skilled labour force (Miller, 2011). Delta State has 25 local government areas that are mostly urbanized with different sizes of business enterprisesoverseen by owners or managers employed by them. The managers oversee the day to day running of the businesses and are expected to adopt strategies that would improve the performance of the enterprises through profit generation and large volume of sales.

Contributions of SMEs to the production base of the nation seem to be little despite the favourable economic climate that abound. Some of the problems faced by SMEs could be attributed to numerous domestic and global economic problems, inconsistency in government policies and poor recruitment processes (Muogbo, 2013& Oroka, 2013). In Delta State, in particular, Kanu (2015) and Oroka (2013) revealed that SMEs experience minimal growth rate and some have even closed down in the first five years of operation. This situation might not be unconnected to lack of qualified employees. According to Opatha (2010), poor recruitment processes in SMES results in low business expansion, business failures and high mortality rate which in most cases lead to sack of workers. According to Okpara and Wynn (2008), the inability of business managers to effectively recruit suitable employees result in business collapse. Thus it becomes expedient that for SMEs to achieve optimum performance, SMEs managers should adequately utilize effective employee recruitment practices. Hence the need for the appraisal.

Appraisal is defined as a judgment of value, performance or nature of something and peoples opinion about something (Harber, 2008). Oyoyo (2014)

defined appraisal as an act of measuring performance in order to know the best way to apply the best practices for a continuous quality improvement. Furthermore, appraisal is seen as a performance evaluation process that seeks to determine the extent to which an objective is attained. In the context of this study, appraisal is defined as the evaluation of the extent to which managers of small and medium scale enterprises utilize employee recruitment practices for improved business performance.

According to Opatha (2010), recruitment is the process of finding and attracting suitably qualified people to work in an organization. It is a set of activities an organization uses to attract job candidates who have the required abilities and attitudes. Ofori and Aryeetey (2011) defined recruitment as the process of generating a pool of competent individuals as employees within an organization. According to Gamage (2014), the general purpose of recruitment is to provide an organization with a pool of qualified employees. The quality of human resource in an organization highly depends on the recruitment practices adopted. The use of the proper recruitment process will increase the probability that the right person is chosen to fill a job vacancy. When the best people are selected for jobs in an organisation, its productivity increases. This is why Terpstra and Rozell (2013) reported a positive association between the extensiveness of the recruiting processes and a firm's profits. Similarly, Rauf (2007) discovered that sophisticated recruitment procedures are positively related to performance in organizations. Regarding some challenges of recruitment and selection criteria in organizations, István (2010) observed that there are plenty of techniques used in recruitment and hiring today some of which are not accepted by experts universally or not recommended for the hiring process.

In all, Sinha and Thaly (2013) observed that there is a variety of recruitment approaches such as employee referral, campus recruitment, advertising, recruitment agencies/consultants, job sites/portals, company websites, social media among others and that SMEs can use a combination of two or more of them as part of the recruitment process or to deliver their overall recruitment strategy. However, which recruiting channels should be used depends on the job position, the SMEs brand, the resources the SME has its recruiting team and on how much recruiting budget it has. Every recruiting channel offers different benefits and limitations and works better for certain situations and companies (Ologunde, Jame-Unam & Jame-Unam, 2015). The key is collecting real-time recruitment metrics on these recruiting channels to figure out what works best for SMEs in different situations. The recruiting experience of each SME is different and the best way to figure out what works best is to analyze metrics based on the past recruiting efforts and not the efforts of everybody else.

Thus it becomes imperative that managers of SMEs in Delta State should take ensure that they recruit suitable employees that will contribute to the achievement of the desired goals and objectives of the enterprises. However, the

adoption of employee recruitment practices in SMEs could be influenced by certain factors that are related to the managers (Opatha, 2010) such as years of business experience and gender. However, the extent to which this assertion is true demands an empirical investigation such as this study. It is against this background that the researchers appraised recruitment practices utilized by managers of small and medium scale enterprises for improved performance in Delta State.

Statement of the Problem

Small and medium scale enterprises are agents of growth and development in any economy. Many SMEs operate in Delta State but their contributions to her growth and development are not being sufficiently felt. This could be because of their slow growth rate and increased rate of business wind up. Based on this, it seems that managers of SMEs in the state do not effectively utilize suitable employee recruitment practices in their recruitment processes. Field observation by the researchers show that some managers of SMEs recruit employees base on the applicants' readiness to accept very low salaries. However, there is need to establish this with empirical data. Hence this study is on the appraisal of recruitment practices utilized by managers of SMEs in Delta State.

Purpose of the Study

The main purpose of the study was to appraise the employee recruitment practices utilized by managers of small and medium scale enterprises for improved performance in Delta State.

Research Question

To what extent do managers of SMEs in Delta State utilize employee recruitment practices for improved performance?

Hypotheses

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

1. There is no significant difference in the mean ratings of managers of SMEs in Delta State on the extent they utilize employee recruitment practices for improved performance based on years of experience (1-5, 6-10 and above 10 years).
2. There is no significant difference in the mean ratings of male and female managers of SMEs in Delta State on the extent they utilize employee recruitment practices for improved performance.

Methodology

Descriptive survey research was adopted for the study. The study was carried out in Delta State. The decision to use Delta State for the study is informed

by the fact that the state has many small and medium scale enterprises (SMEs) which are experiencing reduction in business size, slow expansion rate and even business failures. The population for the study consisted of 420 managers of SMEs in the General Business Service sector operating in Delta State. The entire population was used in the study without sampling. Instrument for data collection was a structured questionnaire titled “Questionnaire on Small and Medium Scale Managers Utilization of Employee Recruitment Practices for Improved Performance (QSMSMUERPIP)”. The instrument had two main sections- A and B. Section A contained two items on respondents’ background information covering years of experience and gender. Section B contained seven items and was structured on a 5- point rating scale of Very High Extent (VHE), High Extent (HE), Moderate Extent (ME), Low Extent (LE) and Very Low Extent (VLE). The instrument was face validated by two experts in the Department of Technology and Vocational Education and one in Measurement and Evaluation, all from Nnamdi Azikiwe University, Awka. To establish the instrument’s reliability, copies were administered on 20 SMEs managers in Awka Metropolis of Anambra State who were not included in the area/population of the study. The data collected were analyzed using Cronbach Alpha and coefficient value of 0.84 was obtained. The researcher administered copies of the instrument to the respondents personally with the aid of six research assistants. Direct delivery and retrieval method was employed in the administration of the instrument in order to minimize wastage and achieve a high return rate. However, where this was not possible, an appointment was booked and the respondents concerned were revisited for retrieval of the instrument. Out of the 420 copies of the questionnaire administered, 374 (representing 89%) were properly filled and used for data analysis.

The mean value was used to answer the research questions while the standard deviation was used to ascertain the homogeneity or otherwise of the respondents’ ratings. The item by item analysis was based on the real limits of numbers on a 5-point rating of Very High Extent, High Extent, Moderate Extent, Low Extent and Very Low Extent. For the hypotheses, ANOVA was used to test the first null hypothesis while t-test was used to test the second null hypothesis at 0.05 level of significance. Where the calculated f or t value is less than the critical value of f or t, it means that the variable does not significantly influence respondents’ mean ratings and the hypothesis was not rejected. Conversely, where the calculated f or t value is equal to or greater than the critical f or t value, it means that the variable has a significant influence on the respondents’ mean ratings and the hypothesis was rejected.

Results

Research Question: To what extent do managers of SMEs in Delta State utilize employee recruitment practices for improved performance?

Table 1: Respondents’ Mean Ratings on Their Utilization of Employee Recruitment Practices for Improved Performance

S/NO	Recruitment practices	Mean	SD	Remarks
1.	Placing the right persons on the right job	2.45	0.75	Low Extent
2.	Using a formal policy for recruitment	2.10	0.64	Low Extent
3.	Ensuring that job vacancies are made open to the public	3.31	0.95	Moderate Extent
4.	Ensuring that existing employees are considered when there are vacancies for higher positions	2.95	0.89	Moderate Extent
5.	Involving heads of units in the recruitment process	2.10	0.79	Low Extent
6.	Using suitable media to advertise vacancies	3.20	0.83	Moderate Extent
7.	Ensuring that the recruitment process is fair to all prospective employees.	3.12	0.97	Moderate Extent
Cluster Mean		2.75		Moderate Extent

The cluster mean of 2.75 as shown in Table 1 indicates that the extent to which managers of SMEs in Delta State utilize employee recruitment practices for improved performance is moderate. The standard deviation of 0.64 to 0.97 shows that the respondents’ opinions are closely related. Data in Table 1 further reveal that the respondents rated items, 3, 4, 6 and 7 to be utilized at a moderate extent with mean ratings ranging between 2.95 and 3.20 and standard deviations ranging between 0.83 and 0.97. However, they rated items, 1, 2 and 5 to a low extent with mean ratings of 2.45, 2.10 and 2.10 and standard deviations of 0.75, 0.64 and 0.79 respectively.

Hypotheses 1: There is no significant difference in the mean ratings of managers of SMEs in Delta State on the extent they utilize employee recruitment practices for improved performance based on years of experience.

Table 2: ANOVA Test of Significant Difference in the Mean Ratings of the Respondents on the Extent they Utilize Employee Recruitment Practices for Improved Performance

Sources	Sum of Squares	df	Mean Square	F-ratio	F-crit.	Remark
Between groups	.607	2	.303	.440	3.04	NS

Within groups	192.329	372	.689
Total	192.936	374	

Table 2 reveals that f-ratio of 0.440 calculated at 0.05 level of significance and at 2 and 372 degrees of freedom is less than the critical value of f of 3.04. This means that there is no significant difference in the mean ratings of managers of SMEs in Delta State on the extent they utilize employee recruitment practices for improved performance based on years of experience. Therefore the null hypothesis was accepted.

Hypothesis 2: There is no significant difference in the mean ratings of male and female managers of SMEs in Delta State on the extent they utilize employee recruitment practices for improved performance.

Table 3: t-Test of Significant Difference in the Mean Ratings of Male and Female Managers of SMEs on the Extent they Utilize Employee Recruitment Practices for Improved Performance

Managers Gender	N	X	SD	df	t-val.	Crit-t	Decision
Female	128	2.36	0.48	372	1.83	1.96	NS
Male	246	2.46	0.49				

The result on Table 3 reveals a t-value of 1.83 at 372 degrees of freedom with a critical t value of 1.96. This means that there is no significant difference in the mean ratings of male and female managers of SMEs in Delta State on the extent they utilize employee recruitment practices for improved performance. Therefore the null hypothesis was accepted.

Discussion

The findings revealed that SMEs managers in Delta State utilized employee recruitment practices for improved performance to a moderate extent. This is in agreement with Ofori and Aryeetey (2011) who found that SMEs moderately utilize recruitment practices in their businesses. Ofori and Aryeetey opined that employee recruitment practices paired with a reliable and valid selection regime have a substantial influence over the quality and type of skills new employees possess. The implication of this line of thought is that an organization's human resource policies and practices represent important forces for shaping employee behaviour and attitudes. In agreement, Ekwoaba, Ikeije and Ufoma (2015) revealed that recruitment and selection criteria have significant effect on organization's performance. Ekwoaba et al opined that the more objective the recruitment and selection criteria, the better the organization's performance.

The findings also revealed that there was no significant difference in the mean ratings of managers of small and medium scale enterprises in Delta State on their utilization of employee recruitment practices for improved performance based on years of experience and gender. This is in line with Ekwoaba, Ikeije and Ufoma (2015) who noted that years of experience and gender did not influence SMEs managers' utilization of recruitment practices. This implies that the years of experience and gender of the managers small and medium scale enterprises did not influence their utilization of employee recruitment practices for improved performance. This could be as a result of the limited nature of their resources and capacity to fully utilize employee recruitment practices in their management of human resources.

Conclusion

Based on the findings of the study, it was concluded that managers of small and medium scale enterprises in Delta State do not adequately utilize employee recruitment practices which could have resulted in incompetent and ineffective workforce that pull the enterprise down. It thus becomes pertinent that suitable recruitment practices and measures are put in place by managers of SMEs in the State at recruiting quality employees for achieving optimum business performance.

Recommendations

Based on the findings of this study, the researchers recommended that:

1. Managers of SMEs should make concerted effort to improve their employee recruitment process and systems through purchase and consistent reading of books and journals on employee recruitment practices.
2. Owners of SMEs should enrol for business classes, conferences and workshops where they will be trained on best human resource management practices for improved SMEs performance.
3. The National Association for Small and Medium Scale Entrepreneurs (NASME) should organize conferences and workshops of her members in order to educate them on the relationship between the recruitment practices and business performance.
4. National Association of Small and Medium Scale Entrepreneurs (NASME) should contract business experts who would assist managers of SMEs in mapping out recruitment plans and strategies for their businesses.

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ACCOUNTING COMPETENCIES REQUIRED BY BUSINESS EDUCATION GRADUATES FOR ENTREPRENEURSHIP VENTURES IN ABIA STATE

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Abstract

The increasing cases of business failures arising from inability of business education graduates to adequately apply accounting competencies in managing businesses informed the need for this study. The purpose of the study was to determine financial accounting and auditing competencies required by business education graduates for entrepreneurship ventures. Two research questions guided the study while two null hypotheses were tested at 0.05 level of significance. The study adopted descriptive survey design. The population of the study comprised 1,809 managers of Small and Medium-scale Enterprises (SMEs) registered with Abia State Ministry of Trade and Investment. Simple random sampling technique was used to select 105 SME managers. A 28-item questionnaire tagged "Accounting Competencies Required for Entrepreneurship Ventures (ACREV)" was used for data collection. The questionnaire had 5-point rating scale. The instrument was validated by three experts. The internal consistency of the instrument was established using Cronbach's alpha method and it yielded a coefficient value of .82. Data collected for the study in respect of the research questions were analysed using mean and standard deviation while z-test was used to test the null hypotheses. Findings of the study showed that financial accounting competencies required by business education graduates for entrepreneurship ventures are ability to prepare final accounts, keep accurate financial records, journalize business transactions, among others. Also, the study showed that auditing competencies required by business education graduates for entrepreneurship ventures are ability to maintain good internal control system for the business, investigate to an acceptable level to establish conformity or non-conformity of transactions to the set rules and procedures, among others. It was concluded that business education graduates must possess financial accounting and auditing competencies required for entrepreneurship ventures in order to manage small scale businesses successfully. Based on the findings, it was recommended among others, that business education students should be encouraged to register for professional programmes in financial accounting and auditing to help them acquire the required competencies.

Keywords: Accounting competencies, Business education and Entrepreneurship
Introduction

The drastic changes in the business world caused by changes in technology, dynamic business policies, business complexities and globalization have placed much demand on business education graduates to acquire accounting competencies in line with global accounting practices so as to be able to manage entrepreneurship ventures effectively. The global economic crisis and the fluctuations in oil price have had adverse consequences on economic activities in developing countries like Nigeria that depend heavily on crude oil as the major source of revenue. This phenomenon thus brings a myriad of daunting challenges in managing entrepreneurship ventures profitably, especially in Nigeria. Some of the business challenges that operators of small businesses often experience include stiff competition, rising inflation, difficulties in forecasting demand and supply of goods, increase in cost of capital or interest rate, low turnover, low profit, frequent change of economic policies, poor infrastructure, unstable power supply among others. Ugwushi (2009) identified inadequate infrastructure and poor economic conditions as some of the challenges facing operators of entrepreneurship ventures and which has led to the failure of many businesses in Nigeria. For business education graduates to be able to handle these business challenges well and remain afloat, they require accounting competencies which are embedded in business education programme.

Popham in Inegbedion, Njoku, Ekpenyong, Umoru and Liadi (2015) defined business education as a course that prepares students for entry into and advancement in jobs within business and it is equally important because it prepares students to handle their own business affairs and to function intelligently as consumers and citizens in a business economy. Similarly, Osuala (2004), saw business education as a programme of instruction which consists of two parts: (a) office education which is a vocational education programme for office careers through initial refresher and upgrading education leading to employability and advancement in office occupations, and (b) general business education which is a programme to provide students with information and competencies which are needed by all in managing personal business affairs and in using the services of the business world.

Business education aims at developing high calibre professionals in business establishments. In accordance, the National Universities Commission (NUC) Benchmark Minimum Academic Standard, (2007) stated that the objective of business education programme shall be to produce manpower endowed with analytical and critical knowledge of the major factors in contemporary business world to influence the development of a virile economy. This implies that business educators should teach their students to acquire and apply business skills in order to become economically self-reliant and productive in the business world. Aremu and Adeyemi (2011) noted that for business education graduates to be successful in

managing businesses, they must possess accounting competencies which will help them to manage their purchases, revenues, expenses, profit, cash flows, current and non-current assets very well. The importance of these accounting competencies in managing entrepreneurship ventures successfully informed the inclusion of many accounting courses in business education programme by curriculum planners (Mong & Okolocha, 2019).

Accounting competencies are capabilities which include knowledge, professional values, ethics and attitudes to perform accounting and other tasks required (Mohammed & Tengku, 2011; Ekwe & Abuka, 2014). In agreement, Onoh in Etifit, Eminue and Udoh, (2016) maintained that accounting competencies are those competencies in basic accounting required by a person to function competently, confidently and successfully in the process of carrying out one's function of recording daily business transactions. Oyesode in Etifit, Eminue and Udoh (2016) maintained that no business activity could be successfully operated without the possession of accounting skills by the entrepreneur or manager. This is because procurement and spending of money are involved. According to Umoru and Bala (2018), competency acquisition process in a developing country like Nigeria should be in three stages: theoretical, practical and exposure to challenges. At the theoretical stage, business education students in the classroom are taught the theories and principles that underlie the application of a given concept. The students are exposed to the broad knowledge of business, marketing, economics, business laws, business mathematics, accounting among others. This is aimed at broadening their horizon on business and the business economy. Business education students at this stage, attend intensive lectures, seminars, conferences; do coursework, presentations, debates, research and other assignments in order to be grounded with the factual knowledge of business.

At the practical stage, the students are taken to private business firms, accounting firms, computer laboratory, typing pool and shorthand laboratory to acquire hands-on skills to complement the theoretical knowledge they have learnt. At the last stage which is exposure to challenges, business education students are made to proceed on Students' Industrial Work Experience Scheme (SIWES) where they get attached to business firms and industries; and work with them intensively for six months under the supervision of industry-based supervisors. It is expected that on completion of these stages of skill acquisition, would-be graduates of business education would have acquired in no small measure, the knowledge, skills and attitudes in accounting competencies needed for floating and managing entrepreneurship ventures successfully without liquidation in foreseeable future time.

Keeping good financial accounting record is the backbone of every well-performing business enterprise. To manage a business effectively and efficiently, economic information must be expressed in monetary terms and in the right manner. According to Institute of Chartered Accountants of Nigeria (2014),

financial accounting is a term that describes a system of accounting records for business transactions and other items of a financial nature; and reporting the financial position and the financial performance of an entity in a set of financial statements. To Robbert (2012), financial accounting is the process of collecting, recording, presenting and analyzing or interpreting financial information for the users of financial statements. Egbunike (2014) defined financial accounting as the field of accounting that develops information for external decision-makers such as banks, shareholders, trade unions, suppliers and government regulatory agencies. The content of financial statements may vary depending on whether a business is a sole proprietorship, partnership or company. However, the basic process used to record transactions is similar for all types of entities. Raymond, Ezenyirimba, and Moses (2014) found that keeping accounting records adequately, contributes significantly to the good performance of small scale businesses. The authors also revealed that if proper accounting records are kept, they will facilitate efficient, timely decision-making and enhance good performance in small businesses. William in Raymond, Ezenyirimba, and Moses (2014) observed that inability of operators of entrepreneurship ventures to keep accurate financial records makes it difficult for them to access funds from financial institutions. This financial constraint often leads to their extinction within first few months of establishment.

Auditing is a careful and unbiased investigation into any statement of account relating to money, the underlying documents, the physical assets and all other available evidence that will enable the auditor to form an opinion thereon and to report accordingly (Obi, 2011). The overall aim of auditing is to ensure that the business is effectively and efficiently conducted. It can help to detect circumstances that could lead to financial problems in the future. Possession of auditing competencies by business education graduates will help them to set up effective internal control system, verify records of various units and branches of the business and determine whether the records show a true and fair view of the business. The ability of business education graduates to discharge auditing functions in order to uncover fraud perpetrated by employees of the business organisation is still doubtful (Stephen, 2013). According to Oseifuah and Gyekye (2013), small and medium-scale enterprises appear to be the most vulnerable to fraudulent schemes, scams, employee embezzlement, pilferage, and other sundry crimes in the work place because they tend not to have effective internal control systems, which is an aspect of auditing. This carefully perpetrated fraud by the employees of organisations often ruins the business while the fraudster absconds, leaving the owner in dilemma.

Given the above background, this research determined the accounting competencies required by business education graduates for entrepreneurship ventures in Abia State.

Statement of the Problem

Extant literature by Fatemeh, Maryam and Zahra (2013), Cory and Pruske (2012) have shown that business education graduates in Nigeria often experience business failure and many of the businesses set up by them collapse within their first five years of existence. Some smaller percentage goes into extinction between the sixth and tenth year of their establishment, while only about five to ten percent of young firms survive, thrive and grow to maturity (Aremu & Adeyemi, 2011). This observed frequent collapse of small and medium scale businesses in Nigeria is a sufficient proof that practitioners seem to lack relevant competencies for effective entrepreneurship (Ezenwafor, 2010). The society has been denied the much desired benefit of business education programme as the products cannot contribute adequately and meaningfully to the economic and social growth of the society (Gaius-Okeh, Chinakwe & Njoku, 2013).

The opinions of entrepreneurs on what business education graduates can do, if required to set up and manage small scale businesses have become an issue of concern considering the current status of small businesses in Nigeria (Akanisi, 2009). Ademiluyi in Mong and Okolocha (2019) held that various reports have shown that many of the small enterprises in Nigeria collapse within five years of their establishment due largely to poor management. Regina and Onwumere (2010) also noted that there is strong evidence that businesses established and managed by Nigerian graduates (Business education graduates inclusive) are often afflicted by the same lack of accounting skills that bedevil other businesses. This suggests that business education graduates have not lived up to their expectation in terms of managing entrepreneurship ventures. It is doubtful if business education graduates possess the required financial accounting and auditing competencies for managing entrepreneurship ventures successfully.

Purpose of the Study

The purpose of the study was to determine the accounting competencies required by business education graduates for entrepreneurship ventures in Abia State, Nigeria. Specifically, the study determined the:

1. financial accounting competencies required by business education graduates for entrepreneurship ventures in Abia State
2. auditing competencies required by business education graduates for entrepreneurship ventures in Abia State

Research Questions

The following research questions guided the study:

1. What are the financial accounting competencies required by business education graduates for entrepreneurship ventures in Abia State?
2. What are the auditing competencies required by business education graduates for entrepreneurship ventures in Abia State?

Hypotheses

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

1. There is no significant difference in the mean ratings of male and female SME managers on financial accounting competencies required by business education graduates for entrepreneurship ventures in Abia State.
2. There is no significant difference in the mean ratings of male and female SME managers on auditing competencies required by business education graduates for entrepreneurship ventures in Abia State.

Method

The study adopted descriptive survey design. The design was considered appropriate for this study since it was concerned with exploring the opinions of a sample and generalizing the findings on the entire population. The population for this study comprised 1809 managers of small and medium-scale enterprises whose businesses were registered with Abia State Ministry of Trade and Investment. The information on population of this study was obtained from Abia State Ministry of Trade and Investment. Simple random sampling technique was used to select 105 managers of small and medium-scale enterprises. A structured questionnaire containing 28 items was used as instrument for data collection. The instrument had a 5-point response options of Very Highly Required (5 points), Highly Required (4 points), Moderately Required (3 points), Lowly Required (2 points) and Very Lowly Required (1 point). The face validity of the instrument was established using three experts. The researcher effected the corrections pointed out by the experts before the final production and use of the instrument. Cronbach's alpha method was used to establish the internal consistency of the instrument and it yielded coefficient value of .82. The researcher personally administered the instrument directly to the respondents with the help of five research assistants. Out of 105 questionnaires administered, 87 of them were correctly filled and used for the study. The data collected in respect of the research questions were analyzed using mean and standard deviation while z-test statistical tool was used to test the null hypotheses at .05 level of significance. Items on the questionnaire with mean ratings of 3.0 and above were regarded as financial accounting and auditing competencies required by business education graduates for entrepreneurship ventures while those with mean ratings below 3.0 were regarded as competencies

not required for entrepreneurship ventures. The standard deviation was used to determine the homogeneity or otherwise of the respondents in their responses. The reason for using z-test was because the sample size was large. The null hypotheses were not rejected since the z-calculated values were less than their z-critical values.

Results

Research Question 1: What are the financial accounting competencies required by business education graduates for entrepreneurship ventures in Abia State?

Table 1: Mean ratings of SME managers on the financial accounting competencies required by business education graduates for entrepreneurship ventures in Abia State

S/N	ITEMS - Ability to:	X	SD	Remark
1.	Prepare final accounts at the end of the year.	3.7	0.89	Required
2.	Keep accurate financial records.	3.8	0.91	Required
3.	Journalise business transactions appropriately.	3.2	1.02	Required
4.	Interpret simple financial statements.	4.0	0.96	Required
5.	Apply new trends in relation to accounting concepts in the preparation of financial statements.	3.4	0.85	Required
6.	Prepare control accounts.	3.3	1.03	Required
7.	Carry out financial ratio analysis from the financial statement of the business.	3.4	1.01	Required
8.	Prepare Reconciliation Statements.	3.2	1.04	Required
9.	Identify account payables and account receivables.	3.9	0.98	Required
10.	Record depreciation of assets in the appropriate books.	3.4	0.75	Required
11.	Find out sources of capital.	4.2	0.83	Required
12.	Handle double entry book-keeping.	3.2	0.88	Required
13.	Keep up-to-date credit sales records.	4.2	0.79	Required
14.	Make entries in financial records using accrual concept.	3.8	0.86	Required
	Cluster Mean	3.62		Required

Data in Table 1 show that all the financial accounting competencies are required by business education graduates for entrepreneurship ventures. This is shown by the cluster mean of 3.62 and all the items having mean scores above 3.0. The standard deviations are within the same range. This also shows that the respondents do not vary significantly in their opinions on the financial accounting

competencies required by business education graduates for entrepreneurship ventures in Abia State.

Research Question 2: What are the auditing competencies required by business education graduates for entrepreneurship ventures in Abia State?

Table 2: Mean ratings of SME managers on the auditing competencies required by business education graduates for entrepreneurship ventures in Abia State

S/N	ITEMS - Ability to:	X	SD	Remark
15.	Maintain a good internal control system for the business.	3.8	0.94	Required
16.	Formulate proactive business policies.	4.2	1.12	Required
17.	Carry out risk analysis in the management of the business.	3.6	1.02	Required
18.	Apply appropriate sampling techniques to audit documents.	3.9	0.98	Required
19.	Review risk management strategies.	3.7	1.05	Required
20.	Evaluate evidence as part of internal audit work.	4.2	0.87	Required
21.	Accurately record audit evidence as it is collected.	3.6	0.79	Required
22.	Identify problems or areas of concern in the business.	3.9	0.89	Required
23.	Investigate to an acceptable level to establish conformity or non-conformity of transactions to the set rules and procedures.	3.7	1.09	Required
24.	Apply relevant audit standards in performing internal functions.	3.5	1.05	Required
25.	Professionally pay attention to details of transactions.	4.0	0.85	Required
26.	Treat sensitive and confidential information appropriately.	3.8	0.96	Required
27.	Perform compliance test to ensure that controls are adhered to.	3.2	1.01	Required
28.	Verify the accuracy of acquired information	4.1	0.81	Required
	Cluster Mean	3.80		Required

Information in Table 2 reveal that all the auditing competencies are required by business education graduates for entrepreneurship ventures. This is shown by the cluster mean of 3.8. The standard deviations are within the same range. This also shows that the respondents do not vary significantly in their opinions on the auditing competencies required by business education graduates for entrepreneurship ventures in Abia State.

Hypothesis 1: There is no significance difference in the mean ratings of male and female SME managers on the financial accounting competencies required by business education graduates for entrepreneurship ventures in Abia State.

Table 3: The z-test of difference between the mean ratings of male and female SME managers on the financial accounting competencies required by business education graduates for entrepreneurship ventures in Abia State

Variables	N	Mean	SD	Df	z-cal.	z-crit.	Remarks
Male	54	3.68	1.14	85	0.22	1.96	NS
Female	33	3.63	1.05				

Information in Table 3 show that z-calculated value is 0.22 while z-critical value is 1.96 at 0.05 level of significance. The null hypothesis is therefore not rejected since z-calculated value is less than z-critical value. This means that male and SME managers do not differ significantly in their mean ratings on the financial accounting competencies required by business education graduates for entrepreneurship ventures.

Hypothesis 2: There is no significance difference in the mean ratings of male and female SME managers on the auditing competencies required by business education graduates for entrepreneurship ventures in Abia State.

Table 4: z-test of difference between the mean ratings of male and female SME managers on the auditing competencies required by business education graduates for entrepreneurship ventures in Abia State

Variable	N	Mean	SD	Df	z-cal.	z-crit.	Remarks
Male	54	3.68	1.18	85	1.44	1.96	NS
Female	33	3.30	1.18				

Information in Table 4 shows that z-calculated value is 1.44 while z-critical value is 1.96 at 0.05 level of significance. The null hypothesis is not rejected since the z-calculated value is less than z-critical value. This means that male and female SME managers do not differ significantly in their mean ratings on the auditing competencies required by business education graduates for entrepreneurship ventures.

Discussion

Finding of the study showed that financial accounting competencies required by business education graduates for entrepreneurship ventures are ability to prepare final accounts, keep accurate financial records, journalise business transactions, interpret simple financial statements, carry out ration analysis form the financial statements of a business, prepare control accounts, prepare

reconciliation statements, identify account payables and receivables and record depreciation of assets in the appropriate books of account. The SME managers irrespective of gender did not differ significantly in their mean ratings on the financial accounting competencies required by business education graduates for entrepreneurship ventures. This implies that both male and female SME managers were of the same opinion that business education graduates require those financial accounting competencies to succeed in entrepreneurship ventures. The finding supports the position of Anyachukwu in Enemuo (2013) that financial accounting skills are needed for effective management of small scale businesses in order to be able to surmount the challenges of stiff competition and remain afloat.

Most small businesses fail because their managers do not prepare end-of-year financial statement; hence, they lack knowledge of the financial position of the business. This situation makes them not to know on time when the return on investment of business begins to decline as to take remedial actions. Such managers of small businesses discover that the business is no longer viable when it is too late and the business eventually fails. According to Ali and Ali (2103), possession of financial accounting competencies helps business education graduates and entrepreneurs to keep accurate financial records of the business in conformity with accounting concepts and conventions, source for capital, prepare end-of-year financial statements of the business and be able to interpret financial statement. Consequently, the graduates will be able to know the financial position of the business at all times. The knowledge of the financial position of the business guides the entrepreneur in controlling material cost, labour cost and overheads of the business and in making pricing policy that will give the firm competitive advantage over its competitors.

Findings of the study also showed that auditing competencies required by business education graduates for entrepreneurship ventures are ability to maintain good internal control system for the business, investigate to an acceptable level to establish conformity or non-conformity of transactions to the set rules and procedures, discover fraudulent practices, carry out risk analysis for the business, review risk management strategies, record and evaluate audit evidence as collected, identify problem areas in the business and apply appropriate sampling techniques to audit financial records. The result of the z-test of difference between the mean ratings of male and female SME managers on the auditing competencies required by business education graduates for entrepreneurship ventures revealed that no significant difference exist in the mean ratings of the male and female SME managers. This finding supports the findings of Oseifuah and Gyekye (2013) that internal control practices among small business sector enterprises is low, with only 45 percent of firms surveyed having adequate internal controls systems in place. Similarly, Stephen (2013), Olasupo, Sorunke and Olawuyi (2016) found that the absence of internal control practices and maintenance of standard auditing

system have been the major impediments to statutory auditing of many small and medium-scale enterprises.

Some small businesses fail after a short time of existence due to the failure of the managers to apply auditing competencies in setting up effective internal control system within the firm. Existence of effective internal control system in a firm promotes the setting of rules and regulations that guide activities in the business, formulation of proactive business policies, timely identification of problem areas in the business, performance of periodic auditing exercise in every branch of the business, recording and evaluation of audit evidence, performance of compliance tests, risk analysis and the application of relevant audit standards in performing internal procedures. However, these auditing functions can only be performed effectively by SME manager who is very competent in auditing (Ibrahim, Abdullah, & Faudizia, 2014). The result of a business education graduate not possessing auditing competencies required for entrepreneurship venture is that a lot of embezzlement and other carefully orchestrated sharp practices go on in the business without been noticed until it gets to a point where the business can no longer survive.

Conclusion

Entrepreneurship plays significant roles in achieving economic growth and reducing unemployment among graduates. This is because entrepreneurship provides employment opportunities to teeming youths and encourages the use of local materials for the production of goods and services. However, managing entrepreneurship challenges successfully is a herculean task. The success or failure of any small scale business will depend on the competencies possessed by the SME manager. For business education graduates to effectively and efficiently manage small scale businesses successfully, they must possess financial accounting and auditing competencies required for entrepreneurship ventures.

Recommendations

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

1. Business education programme administrators and implementers should put more effort in furnishing business education libraries with more current textbooks on financial accounting and auditing. This will enable students to have access to the books and study them more with a view to improving on their competency level. This is because financial impediments may make it difficult for some students to buy these textbooks for their usage.
2. Business education students should be encouraged by their lecturers, parents and guardians to register for professional programmes in financial accounting and auditing to help them acquire and improve their competencies.

3. Business education students while in school should attend seminars and conferences on emerging trends in financial accounting and auditing in the management of business organisations. This will enable them to learn and acquire those competencies.

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EXTENT OF UTILIZATION OF E-LEARNING RESOURCES BY BUSINESS EDUCATION STUDENTS IN PUBLIC TERTIARY INSTITUTIONS IN ENUGU STATE

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Abstract

The study ascertained the extent of utilization of e-learning resources by business education students in public tertiary institutions in Enugu State. Two research questions were posed and four hypotheses tested. A total of 1407 business education students in four public tertiary institutions in Enugu State made up the population of the study, out of which 312 students were used as sample. The research instrument was a structured questionnaire titled “The Extent of Utilization of E-learning Resources by Business Education Students” (EUEBES). Three experts validated the instrument and a reliability test using Cronbach alpha method yielded correlations of 0.87 and 0.76 B1-B2 of the instrument respectively. Mean rating was used to answer the research questions while z-test was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed among others that business education students in public tertiary institutions utilized e-learning resources for peer tutoring to a high extent and they moderately utilize e-learning resources for class discussions. To encourage the utilization of e-learning by business education students, it was recommended, among others, that the management of public tertiary institutions in Enugu State should provide e-learning resources like digital libraries and free wireless internet connections on the campuses.

Key words: Utilization, e-learning resources, business education students, public tertiary institutions.

Introduction

The changes in education have led to a paradigm shift from teacher centeredness to learner centredness. This implies that the teacher can no longer decide what should be learnt, instead, the learner’s interest determines what and how students should learn. This situation is popular on electronic learning (e-learning). Electronic learning exploits interactive technologies and communication systems to improve learning experiences. It has the potential to transform the way teaching and learning take place across the board. E-learning

therefore, is a learner-controlled self-paced education environment where the learners have authority over the learning environment, thereby allowing the learners to work at their pace, convenience access and assessment (Eke, 2011).

E-learning is a term that is used to refer to all Information and Communication Technologies (ICTs), networks, internet and other forms of electronic media that can be used to enhance teaching and learning so as to transfer knowledge and skills (Kassa & Balunywa, 2013). The integration of ICT in education has revolutionized and transformed the education sector worldwide and created positive impacts in teaching and learning (Intel, 2012). E-learning resources take various forms. For instance, it can be web-based, computer-based, virtual classrooms and content delivery via e-networks, audio or video tape, satellite TV, video conferencing, CD-ROM, i-pods, e-mails, wireless and mobile technology among others (Eke, 2011). The growth in internet characterized by the decreasing costs and increasing bandwidth has facilitated the expansion and increased use of e-learning to offer formal as well as informal educational opportunities that were previously not possible to hundreds of learners (Bonk, Lee & Reynolds, 2009).

E-learning literally means electronic learning, (learning by electronic means and through electronic devices). E-learning is an inclusive term that describes educational technology that electronically or technologically supports learning and teaching. Parks (2013) suggested that “e-” should refer to “everything, everyone, engaging and easy” in addition to ‘electronic’. Developments in internet and multimedia technologies are the basic enablers of e-learning, with consulting, content, technologies, services and support being identified as the five key sectors of the e-learning industry (European Commission, in Olatoye, 2015). Regardless of the educational level or stage, e-learning can be adopted, used or applied in education for effective teaching and learning. E-learning is a learner-controlled, self-paced education environment where the learner has authority over the learning environment; by allowing learners to work at their pace and convenience (Eke, 2011). The extent to which e-learning assists or replaces other learning and teaching approaches is varied, ranging on a continuum from none to fully online distance learning (Bates & Poole, 2013).

The integration of e-learning in tertiary institutions is witnessing rapid growth in developed countries. Most tertiary institutions in developed countries have websites from which students can take online lectures and participate in other educational activities. Omo-Ettu in Okereke (2005) reported that in developed countries, electronic mail, real time text conferencing, peer tutorials, and online tutorials have been used in the teaching and learning process for several years. Through the provision of the internet by the schools, students who are stuck at home due to bad weather or sickness can complete their assignments. Some schools allow students to retrieve textbook information, check and complete assignments from their personal computers. Students get 24 hours access to

classroom assignments, study guides, daily worksheets and their teachers through e-mail.

In Nigeria, the integration of e-learning in tertiary institutions has witnessed slow growth which may be as a result of mass unawareness. Manir (2011) noted that awareness to ICT in Nigeria started gathering momentum two decades ago. The early exposure came through lecturers, researchers, academics and students who studied abroad and had opportunities of attending conferences on ICT. However, Manir posited that a large number of people are still not aware of the use of these ICTs in education. This is because Nigeria had no specific policy on e-learning until February 2007 when the ICT department of the Federal Ministry of Education was created (Manir, 2011).

The utilization of e-learning by business education students is pivoted by their level of computer literacy. Computer literacy has to do with the degree of proficiency of students in basic computer oriented operations. Olusegun, Oluwafemi and Sushil (2006) noted that the utilization of e-learning resources is affected by the level of computer literacy of the students. This is because when students are knowledgeable in the usage of e-learning resources, they will be able to communicate electronically with their peers, be able to carry out their research work, as well as complete assignments and engage in class discussions. Students who are not competent in the general use of computers will not be able to utilize them for educational purposes, and hence they will discourage the new phenomenon of utilizing electronic devices for education.

Peer tutoring is a flexible, peer-mediated strategy that involves students serving as academic tutors and tutees; such that higher performing student is paired with a lower performing student to review critical academic or behavioural concepts (Hott & Walker, 2012). They listed higher academic achievement, improved relationship with peers, improved personal and social development and increased motivation as benefits of peer tutoring. Productive classroom discussions are those that enable students to invent, create, imagine, take risks and dig for deeper meanings but can only take place in climate in which students feel safe to offer their ideas. Teachers can create such a climate by being mindful of the essential conditions of interactive teaching, in which e-learning can provide.

Utilization of electronic learning among university students most especially business education students would determine to a great extent, if Nigeria could have more independent learners, who are problem solvers and who can contribute positively in improving the way things are done in Nigeria and other nations of the world. Today, students have cell-phones and other digital technologies that are internet enabled, and many have access to the internet-enabled computers. Prensky (2001) found that young people of the digital native generation possess sophisticated knowledge of and skills with information technologies. Whether Nigerian students use these resources, knowledge and skills for e-learning is yet to be empirically ascertained.

Gender can be an influencing factor to the utilization of e-learning by business education teachers and students. Summer in Agboola (2006) suggested that male students experience less anxiety about ICT and make more frequent use of it. The type of institution could influence the success of e-learning integration. Wagner, Hassanein and Head (2008) pointed out success in the utilization of e-learning is influenced by the stakeholders. The authors also noted that budgetary factors in a country could make the procurement of e-learning resources by institutions difficult or easy, as the case may be. The utilization of e-learning resources in colleges of education and universities might differ. It is possible that the management of tertiary institutions can view the utilization of e-learning from different perspective. The federal government-owned and state government-owned institutions may differ in the e-learning resources provided to their students (Leem and Lim, 2007). Eke (2011) and Okiki (2011) also noted that the use of e-learning resources has begun in some federal government owned tertiary institutions. This may not be the case in state-owned institutions, hence this study.

The modern trends in business which include the digitalization of business operations; e-banking; e-commerce; Management Information Systems (MIS) among others, form the basis for encouraging the use of e-learning in today's business education training programme. Students who undergo the business education programme should therefore be able to utilize e-learning resources in education for peer tutoring and class discussions, among others. As the move towards e-learning in higher education continues to grow, the more important it becomes to examine the utilization of electronic learning among business education students in Enugu State public tertiary institutions. This drive to find out how business education students in Enugu State public tertiary institutions utilize e-learning resources, necessitated this research.

Statement of the Problem

Though the importance of e-learning is enormous, it seems that its utilization in instruction and learning in Nigerian tertiary institutions is rather unknown. This is so, because, research in the area of using e-learning resources for peer tutoring and class discussions is scanty.

Furthermore, there appears to be lack of computer culture among business education students in public tertiary institutions which, according to Manir (2011), tends to impede the rapid diffusion of the new technologies. There seems also the issue of lack of computer technology literacy among students. When students are not computer literate, they would find it difficult to adapt to the use of e-learning resources in education.

Purpose of the Study

The major purpose of this study was to determine the extent of utilization of e-learning resources by business education students in public

tertiary institutions in Enugu State. Specifically, the study determined the extent business education students in Enugu State public tertiary institutions utilized:

1. e-learning resources for peer tutoring.
2. e-learning resources for class discussions.

Research Questions

To what extent do business education students in Enugu State public tertiary institutions:

1. utilize e-learning resources for peer tutoring?
2. utilize e-learning resources for class discussions?

Hypotheses

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

1. Gender has no significant influence on the mean responses of business education students in Enugu State on their extent of utilization of e-learning resources for peer tutoring.
2. There is no significant difference in the mean responses of business education students from universities and colleges of education in Enugu State on their extent of utilization of e-learning resources for peer tutoring.
3. Gender has no significant influence on the mean responses of business education students in public tertiary institutions in Enugu State on their extent of utilization of e-learning resources for class discussions.
4. There is no significant difference in the mean responses of business education students from universities and colleges of education in Enugu State on their extent of utilization of e-learning resources for class discussions.

Method

The study adopted descriptive survey design. The study was carried out in Enugu State which is located in the South Eastern part of Nigeria with Enugu as its capital. The population for this study consisted of all the 1407 business education students in the four tertiary institutions offering business education in Enugu State. The institutions are, University of Nigeria, Nsukka; Enugu State University of Science and Technology, Agbani; Enugu State College of Education (Technical), Enugu and Federal College of Education, Eha-Amufu. The sample size for the study was 312 obtained using the Taro Yamane formula. Consequently, business education students were selected using proportionate stratified random sampling technique. Proportionate stratified random sampling technique is used by a researcher to divide the population of a study into sub-groups or strata depending

on the number and type of sub-groups that exist in the population (Akuezuilo & Agu, 2007).

The data for this study were collected through the use of a structured questionnaire titled (EUEBES), developed by the researcher from the review of related literature. It consisted of two parts – A and B. Part A of the questionnaire focused on respondents’ personal data such as gender and institution type, while part B was made up of two clusters of B1-B2 containing a total of 31 items. Cluster B1 has 6 items on the utilization of e-learning resources for peer tutoring while cluster B2 has 8 items on utilization of e-learning resources for class discussions. The instrument for data collection was subjected to face validation by two experts in business education and one in measurement and evaluation, from Nnamdi Azikiwe University, Awka. To establish the reliability of the instrument, the instrument was subjected to reliability test using a pilot test. Copies of the questionnaire were distributed to 20 randomly selected business education students in Anambra State. Data collected were analysed using Cronbach alpha and the reliability coefficients of 0.87 and 0.76 were obtained for clusters B1-B2 respectively. The overall reliability coefficient obtained was 0.82. Copies of the instrument were administered to the respondents by the researcher with the help of three research assistants from the public tertiary institutions selected for the study. The data collected were analyzed using mean ratings and standard deviation for the research questions and z-test for the hypotheses. The data were analyzed using SPSS Version 20. The decision rule was to accept the null hypothesis where the calculated p-value is greater than or equal to 0.05 level of significant. The null hypothesis was rejected where the calculated p-value is less than the alpha level.

Results

Research Question 1: To what extent do business education students in Enugu State public tertiary institutions utilize e-learning resources for peer tutoring?

Table 1: Mean responses of respondents on the extent business education students in Enugu State public tertiary institutions utilize e-learning resources for peer tutoring

S/N	Items	Mean	SD	Remarks
3	I utilize laptops and smart phones for peer tutoring	4.10	1.16	High Extent
4	Internet facilities aid me in peer tutoring	4.17	1.01	High Extent
5	I use email facility in synchronous e-learning for peer tutoring	3.67	1.14	High Extent
6	Digital library in my school assist me for peer tutoring	3.29	1.16	Moderate Extent
7	I use e-journals and e-books for peer tutoring	3.14	1.24	Moderate Extent

8	I participate in online forum for peer tutoring	2.94	1.18	Moderate Extent
Cluster		3.55		High Extent

Data in Table 1 indicated that out of six items on the extent of utilization of e-learning resources for peer tutoring; the respondents rated three items high extent and the other three items moderate extent. The cluster mean score of 3.55 indicates that on the whole, business education students in Enugu State rated utilization of e-learning resources for peer tutoring to a high extent. The standard deviations show homogeneity of their responses, which means that the students have similar views.

Research Question 2: To what extent do business education students in Enugu State public tertiary institutions utilize e-learning resources for class discussion?

Table 2: Mean responses on the extent business education students in Enugu State public tertiary institutions utilize e-learning resources for class discussion

S/N	Items	Mean	SD	Remarks
9	I utilize phone applications in class discussions	3.84	1.29	High Extent
10	I utilize internet facilities for class discussions	3.75	1.19	High Extent
11	I participate in online class discussion	3.18	1.27	Moderate Extent
12	I utilize collaborative software during class discussions	2.82	1.15	Moderate Extent
13	I reference e-mails for class discussions	2.78	1.23	Moderate Extent
14	I utilize Microsoft Word application in class discussion	2.77	1.31	Moderate Extent
15	I make use of Power Point during class discussions	2.94	1.24	Moderate Extent
16	I use MS Excel during class discussion	2.78	1.38	Moderate Extent
Cluster		3.11		Moderate Extent

The item by item analysis in Table 2 showed that all items achieved mean scores ranging from 2.77 to 3.18. Two items indicate high extent while the other six items show moderate extent on the extent of utilization of e-learning resources for class discussion. The cluster mean score of 3.11 indicates that on the whole, business education students in Enugu State rated utilization of e-learning resources for class discussion to a moderate extent. The standard deviations show homogeneity of their responses. Again, the opinions of the students were not wide spread.

Hypothesis 1

Table 3: The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of gender (Male or Female) for peer tutoring

Gender	N	X	SD	P-val	df	z-crit	Remarks
Male	121	21.50	4.94	.513	292	1.960	Not Significant
Female	173	21.15	4.13				

The z-test in Table 3 showed that there is no significant difference in the mean responses of business education students in public tertiary institutions Enugu State on their extent of utilization of e-learning resources for peer tutoring as a result of gender. The analysis shows mean scores of 21.50 and 21.15 for males and females respectively. It also shows the p-value of 0.513 which is greater than 0.05 level of significance at 292 degrees of freedom. The null hypothesis of no significant difference between the two groups is upheld.

Hypothesis 2

Table 4: The z-test summary of the difference between the ratings of business education students in university and their counterparts in colleges of education in Enugu State on their extent of utilization of e-learning resources for peer tutoring

Institution	N	X	SD	P-val	df	z-crit	Remarks
University	140	20.41	4.69	.001	292	1.960	Significant
College	154	22.11	4.12				

Business education students in universities in Enugu state, as shown in Table 4, recorded a mean score of 20.41 on their extent of utilization of e-learning resources for peer tutoring while those in colleges of education recorded a mean score of 21.11. The p-value is 0.001 which is less than 0.05 alpha level at 292 degree of freedom. The null hypothesis is therefore rejected meaning that there is significant difference on the extent of utilization of e-learning resources for peer tutoring by business education students in universities and their counterparts in colleges of education in Enugu State. The difference can be said to be negligible.

Hypothesis 3

Table 5: The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of gender for class discussions

Gender	N	X	SD	P-val	df	z-crit	Remarks
Male	121	24.47	5.75	.405	292	1.960	Not Significant
Female	173	25.11	6.92				

As shown in Table 5, the p-value (0.405) is greater than the alpha level of (0.05) at 292 degree of freedom. The results indicate that male business education students in Enugu State public tertiary institutions with a mean score of 24.47, and female business education students with a mean score of 25.11 do not differ on their extent of utilization of e-learning resources for class discussions. The null hypothesis is therefore retained that there is no significant difference in the mean ratings of business education students in Enugu State tertiary institutions on their extent of utilization of e-learning resources for class discussions as a result of gender.

Hypothesis 4

Table 6: The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of type of institution for class discussions

Institution	N	X	SD	P-val	df	z-crit	Remarks
University	140	23.34	6.97	.000	292	1.960	Significant
College	154	26.21	5.65				

Data in Table 6 indicated that business education students in universities in Enugu State had a mean score of 23.34 in their extent utilization of e-learning resources for class discussions while those in the colleges of education had a mean score of 26.21. The p-value of .000 is less than the alpha level of 0.05 at 292 degree of freedom. Since the p-value is less than the significant value, the null hypothesis is rejected. This implies, therefore, that there is significant difference between the mean ratings of business education students in Enugu State tertiary institutions on their extent of utilization of e-learning resources for class discussions as a result of type of institution.

Discussions of the Findings

Findings of the study regarding the research question 1 revealed that business education students in Enugu State public tertiary institutions utilized e-learning resources for peer tutoring at a high extent and that they have knowledge of various aspects of e-learning resources. This is in line with Okiki (2011) who noted that there is an increasing utilization of information and communication technologies (ICTs) in the teaching and learning process.

The business education students rated using laptops, smart phones, internet facilities, e-journal and participation in online fora as part of e-learning resources for peer tutoring. This could be because these resources have been made part of the educational process. For instance, students must have discussed some group work or assignment among themselves in an online forum on the internet. This contradicts the views of Manir (2011) who noted that students and lecturers fairly utilized e-learning resources in the educational process.

However, Leem and Lim's (2007) findings revealed that both teachers and learners alike, lacked meaningful support systems and opportunities to actively participate in e-learning programs. The authors posited that such lack of support was found to be endemic and to be more acute in private universities, private colleges, universities of education, than mid-sized, small-sized, and provincial universities and colleges.

The test of the first hypothesis revealed that there was no significant difference in the mean responses of business education students in Enugu State public tertiary institutions on the extent of their utilization of e-learning resources for peer tutoring as a result of gender. This means that the male and female students did not differ in their extent of utilization of e-learning resources. No gender is disadvantaged in the utilization of e-learning resources. This is in contrast with the findings of Summer in Agboola (2006) which suggested that male students experienced less anxiety about ICT and make more frequent use of it, while female students are assumed to show lower confidence or knowledge ability than males about using e-learning resources.

However, the test of the second hypothesis revealed that there was significant difference in the mean responses of business education students in universities in Enugu State and their counterparts in colleges of education on their extent of utilization of e-learning resources for peer tutoring. This means that business education students in public universities in Enugu State differed significantly on their extent of utilization of e-learning resources for peer tutoring as a result of institution type. This finding is in line with the findings of Leem and Lim (2007) who discovered differences in support and opportunity to actively participate in e-learning programs among Korean tertiary institutions. In line with this, the result of this study showed that business education students in public universities in Enugu State differ significantly from their counterparts in colleges of education.

Findings of the study on the research question 2, revealed the utilization of e-learning resources for class discussions by business education students in Enugu State public tertiary institutions. The findings showed that the students utilized e-learning resources for class discussions at a moderate extent. This proves that majority of the students did not use e-learning resources during teaching and learning in the classroom. This is in contradiction with Abubakar (2010), and Ajadi, Salawu and Adeoye (2008) who pointed out that students do not have access to computers and the internet.

The test of the third hypothesis revealed that there was no significant difference in the mean ratings of business education students in Enugu State public tertiary institutions on their extent of utilization of e-learning resources for class discussions as a result of gender. This means that male business education students in Enugu State public tertiary institutions do not differ from the female students in how often they utilized e-learning resources for class discussions. Gender, therefore, is not a factor in the effective integration of e-learning in the educational process. This contradicts the views of Murphy and Greenwood (1998) who reported that age and gender effects could be factors in determining the extent of low student ICT uptake.

However, the test of the fourth hypothesis revealed that there was a significant difference in the mean responses of business education students in Enugu State public tertiary institutions on the extent of utilization of e-learning resources for class discussions as a result of institution type. This means that university business education students in Enugu State public tertiary institutions differed from the college of education students on the extent they utilized e-learning resources for class discussions. Wagner, Hassanein and Head's (2008) study is in agreement with this finding because they did submit that type and ownership of tertiary institution could influence the success of e-learning integration. Wagner et al. pointed out that the success of the utilization of e-learning resources is influenced by the stakeholders.

Conclusion

Based on the findings of the study, it is concluded that business education students in public tertiary institutions in Enugu State utilized e-learning resources for peer tutoring, class discussion, research purposes and in class assignments. Similarly, students can access the internet and other e-learning resources through their mobilephones, personal laptops, digital libraries and computer studios provided by the institutions.

Recommendations

Based on the findings, the following recommendations were made:

1. That since business education students utilise e-learning for peer tutoring,

- management of public tertiary institutions in Enugu State should provide e-learning resources in their institutions to enable the students access and utilize them better.
2. Lecturers should provide enabling environment to encourage class discussions with the use of e-learning resources.
 3. Administrators of public tertiary institutions in Enugu state should provide e-learning resources to facilitate qualitative research among students.
 4. Business educators should give students class assignments to be done and submitted through any of the e-learning platforms.
 5. There should not be disparity in provision of e-learning resources to male and female students. This is because gender does not matter.

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EXTENT OF UTILIZATION OF ADVERTISING AS A MARKETING COMMUNICATION STRATEGY BY MANUFACTURING COMPANIES IN ANAMBRA STATE

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Abstract

The need to improve and ensure effective marketability of products of manufacturing companies necessitated this study on the extent of utilization of advertising as a marketing communication strategy by manufacturing companies in Anambra State. One research question guided the study and two null hypotheses were tested. Descriptive survey research design was employed for the study. The population consisted of 298 executives (managers and owners) of registered manufacturing companies in Anambra State. The entire population was studied without sampling because the size was not too large. The instrument for data collection was a researcher developed questionnaire titled "Marketing Communication Strategy Questionnaire (MCSQ)". The questionnaire was validated by three experts. The internal consistency of marketing communication strategy questionnaire (MCSQ) was established using Cronbach alpha and reliability coefficient value of 0.86 was obtained. Mean and standard deviation were used to answer the research question while t-test and ANOVA were used to test the null hypotheses at 0.05 level of significance. Findings of the study revealed that manufacturing companies in Anambra State utilized advertising to a moderate extent. It was recommended among others that business educators in tertiary institutions should be innovative in their instructional delivery by exposing their students to all components of marketing communication strategies to enable them successfully operate their own small and medium scale enterprises after graduation.

Key words: Advertising, Manufacturing Companies, Utilization.

Introduction

Manufacturing companies are the main instrument for rapid growth, structural change and economic sufficiency of the Nigerian nation where they increase employment opportunities, help boost agriculture and increase foreign exchange earnings of the nation. Globally, manufacturing companies are acknowledged as generators of economic growth and business development

incombining, coordinating and utilizing advertising as an integrated marketing communication strategy with great impact on their companies' product services and by extension, on product market share. Manufacturing companies exist to convert raw materials, components or parts into finished goods that meet customers' expectations or specifications. They employ a man-machine set up with division of labour in a large scale production. Soderbom and Teal (2012) defined manufacturing companies as series of interrelated activities such as operating, inspection, transportation and storage taken to accomplish the prime objective of converting raw materials into quality finished goods.

Prior to the oil boom of the 1970's, manufacturing companies contributed approximately 10 percent profit to Nigeria's economic output. Thereafter decreased revenues from oil caused manufacturing companies' relative Gross Domestic Product (GDP) share to decline, and growth in the sector continued at a slow rate. Similarly, since a peak of 7.83 percent profit was attained in 1982, the contributions of manufacturing companies as a share of total economic output in Nigeria generally declined. Many factors have contributed to the variations manufacturing companies share through time, many of which show both the vulnerability of the manufacturing companies to global economic pressures, as well as the impacts that policy changes can have in reshaping the companies. This calls for a policy shift from oil to manufacturing. As noted by Freeman (2012), manufacturing companies must embrace advertising as marketing communication strategy if they hope to attract more customers for increased sales and productivity, and chances of survival in the global market place.

Advertising as a marketing communication strategy refers to the creation of a unique valuable marketing position involving different sets of activities in order to achieve marketing objectives. These are used practically to offset the weakness of one medium by the strength of another medium with elements synergized to support each other and create greater impact. There are a number of marketing communication strategies (MCS) that can be utilized by manufacturing companies to enhance their performance. One of such is advertising which is a marketing communication strategy that employs open sponsorship and accepts non-personal messages to promote or sell a product, service or idea. In the opinion of Haugh (2009), advertising is any paid form of non-personal presentation and promotion of an organization's ideas, goods and services by an identified sponsor to a target audience. This is achieved through mass media such as television, radio, outdoor displays, newspapers, magazines, direct mail and signs on mass transit vehicle. The fact that advertising is a form of communication that attempts to influence the behavior of a defined target audience, any message developed and placed in the media with the ultimate intention of persuading a group to take specific actions (such as buying a product) can be considered an advert. To make sales, manufacturing companies benefit from advertising as it helps the public to recognize their brands.

The application and utilization of advertising as a marketing communication strategy (MCS) provide sellers, suppliers, organizations, managers, owners, individuals and manufacturing companies numerous opportunities. According to Chaffey, Ellis-Chadwick, Mayer, and Johnson (2010), manufacturing companies require large markets, distribution channels, advertising media and abundant platforms for sales transactions. Manufacturing companies stand to gain more by utilizing opportunities derived from MCS in view of their limited resources and strong competition (El-Gharry, 2012).

Despite the invaluable contributions of manufacturing companies to economic growth in developing countries, Adeloje (2012) noted that their contributions to GDP especially in Nigeria is relatively low as a result of major constraints and challenges in their operations. Such constraints and challenges include rapid changes in the nature of business and form of business communication such as advertising. There have been changes in businesses and marketing practices as a result of challenges from external forces like technology, the Internet and globalization. Manufacturing companies also face problems of coordinating marketing communications strategies in order to deliver clear, consistent, credible and competitive messages about themselves and their products (Govoni, 2014). Despite the fact that the performance of manufacturing sector is being adversely affected by strong competitions. Some companies in the sector have, in their own diverse ways, adopted some marketing communication strategies that have enabled them survive stiff competitions over the years. However, the utilization of advertising as a marketing communication strategy is still hindered by poor awareness by executives of their companies, level of education and status (Suhr, 2010). The status of the executives of manufacturing companies could be individuals who see to the day to day affairs of the companies. They are either the business owners of the companies or the managers who are employees of the companies.

Statement of the Problem

Despite the importance of manufacturing companies to the nation, scholars in Nigeria generally and Anambra State in particular have done few empirical investigations on the extent of utilization of advertising as a marketing communication strategy (MCS) and this has created a gap in the research of marketing communication strategy by manufacturing companies from a broad perspective.

Consequently, MCS is neglected by so many business owners and managers of manufacturing companies in Nigeria and Anambra State in particular. This is sequel to the fact that manufacturing companies fail to utilize its objectives of marketing and persuading of their customers in most companies. This failure may be attributed to inadequate access to finance, technological growth, economic state of the nation, difficulty in accessing global market and, most importantly,

poor knowledge and non adoption of marketing communication strategies in their companies. Failure to adopt advertising strategies by business owners and managers of manufacturing companies make it difficult for them to survive or maintain their business operations in the global market.

The problem of this study is that manufacturing companies, in Nigeria generally and Anambra State in particular, are persistently failing with ugly consequences of under development, insufficient utilization of marketing strategies, low contribution to Gross Domestic Product (GDP) and poverty among others. The extent manufacturing companies in Anambra State utilize advertising as marketing communication strategy (MCS) is not known, hence the imperativeness of this study on the extent of utilization of advertising as a marketing communication strategy (MCS) by manufacturing companies in Anambra State.

Purpose of the Study

The purpose of this study was to determine the extent of utilization of advertising as a marketing communication strategy (MCS) by manufacturing companies in Anambra State. Specifically, the study determined the extent manufacturing companies in Anambra State utilize advertising as a marketing communication strategy.

Research Question

To what extent do manufacturing companies in Anambra State utilize advertising as a marketing communication strategy?

Hypotheses

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

1. There is no significant difference in the mean ratings of business owners and managers on their extent of utilization of advertising as a marketing communication strategy.
2. Business owners and managers do not differ significantly on their mean ratings on the extent of utilization of advertising as a marketing communication strategy based on level of education (NCE/OND, BSc/HND, MSc/PhD).

Method

The study adopted descriptive survey research design. The study was carried out in Anambra State of Nigeria. The population of the study comprised all 298 owners /managers of registered manufacturing companies in Anambra State. The entire population was studied without sampling because the size was not too large. The instrument for data collection was a structured questionnaire developed by the researcher. The instrument was structured on a 5- point rating scale of Very

Great Extent (VGE), Great Extent (GE), Moderate Extent (ME), Small Extent (SE) and Very Small Extent (VSE).

The instrument was subjected to face validity by three experts,- two in business education and one in measurement and evaluation. The experts scrutinized the instrument to determine its relevance. Based on the comments and suggestions of the experts, some item statements were modified to fit the research purposes. In order to ensure the reliability of the instrument, pilot test was used. The instrument was administered on 30 managers and owners of manufacturing companies in Enugu State who were not included in the population of the study. Cronbach alpha was used to determine the internal consistency of the instrument and coefficient value of 0.86, was obtained.

The copies of questionnaire were personally administered by the researcher to the respondents in their offices with the aid of three research assistants who were briefed on the procedure for the research. On the spot completion and retrieval method was adopted. Data collected were analyzed using descriptive statistics of mean and standard deviation to answer the research question and decision for the items was based on item and cluster means relative to the real limits of number as shown below:

Responses	Rating scale	Limit of Numbers
Very Great Extent (VGE)	5	4.50-5.00
Great Extent (GE)	4	3.50-4.49
Moderate Extent (ME)	3	2.50-3.49
Small Extent (SE)	2	1.50-2.49
Very Small Extent (VSE)	1	1.00-1.49

The t-test and Analysis of Variance (ANOVA) were used to test the null hypotheses at 0.05 level of significance. The computation was done using the Statistical Package for Social Sciences (SPSS) version 23. For the hypotheses, where the calculated p-value is less than the stipulated level of significance (0.05), it means that there was significant difference and the hypothesis was rejected. Conversely, where the calculated p-value is equal to or greater than the stipulated level of significance (0.05), it means that there was no significant difference and the hypothesis was not rejected.

Results

Research Question 1: To what extent do manufacturing companies in Anambra State utilize advertising as a marketing communication strategy?

Table 1: Respondents’ Mean Ratings on the Extent Manufacturing Companies in Anambra State Utilize Advertising as a Marketing Communication Strategy.

S/N	Advertising	Mean	SD	Decision
1.	My company pays newspaper publishers to advertise its products	2.70	0.83	Moderate extent
2.	Buys pages of magazines for marketing its products	2.37	0.71	Small extent
3.	Markets its products through radio advertising and commercials	2.65	0.75	Moderate extent
4.	Markets its products through mobile advertisement	2.58	0.79	Moderate extent
5.	Uses bulk sms to market its products	3.24	0.92	Moderate extent
6.	Markets its products through television advertisement	2.08	0.89	Small extent
7.	Markets its product through internet	2.13	0.70	Small extent
8.	Uses advertising media to pass information to Customers quickly.	2.91	1.02	Moderate extent
9.	Uses persuasion to invite the publics to its products.	2.87	1.02	Moderate extent
Cluster Mean		2.61		Moderate extent

Table 1 shows that the cluster mean is 2.61 which indicates that manufacturing companies in Anambra State utilize advertising as a marketing communication strategy to a moderate extent. The standard deviations of 0.70 to 0.92 are within the same range showing homogeneity in responses.

Hypothesis 1: There is no significant difference in the mean ratings of business owners and managers on their extent of utilization of advertising as a marketing communication strategy.

Table 2: The t-test analysis of respondents’ mean ratings on their extent of utilization of advertising as a marketing communication strategy based on status (owner/ manager)

Source of Variation	N	\bar{X}	SD	df	P-value	Decision
Managers	199	2.60	.37	284	0.45	Not Significant
Owners	87	2.65				

Table 2 shows that the p-value of 0.45 is greater than the significance level of 0.05. This indicates that managers and owners of manufacturing companies in Anambra State do not differ significantly in their mean ratings on the extent they

utilize advertising as a marketing communication strategy. The null hypothesis of no significant difference between the two groups is, therefore, accepted.

Hypothesis 2: Business Owners and managers do not differ significantly in their mean ratings on the extent of utilization of advertising as a marketing communication strategy based on level of education (NCE/OND, HND/B.Sc., M.Sc./PhD).

Table 3: ANOVA Summary of Respondents' mean Ratings on their Extent of Utilization of Advertising as a Marketing Communication Strategy based on level of education (NCE/OND, BSc/HND, MSc/PhD)

Sources of Variance	Sum of Squares	Df	Mean Square	F	P	Decision
Between Groups	.030	2	.015	.110	.895	NS
Within Groups	38.652	283	.137			
Total	38.682	285				

Note. NS = not significant

Table 3 shows that the p-value of .895 is greater than the 0.05 level of significance. This means that the respondents do not differ significantly in their mean ratings on the extent they utilize advertising as a marketing communication strategy as a result of level of education (NCE/OND, HND/B.Sc., M.Sc./PhD). Therefore, the null hypothesis is accepted.

Discussion

The findings of the study revealed that the executives of manufacturing companies in Anambra State utilized advertising as a marketing communication strategy to a moderate extent. This finding is in consonance with George (2010) who found that the operators of shopping malls in Bayelsa State utilized advertising as a marketing strategy to a moderate extent and that the use of various advertising media and display of shopping goods in strategic areas in shops influenced consumers to buy. This finding is also in agreement with Nwokolo (2016) who reported that television advertising was the most effective medium for reaching consumers' demand for seven-up soft drink. It thus means that the use of advertising as an integrated marketing communication strategy would go a long way in enhancing the sales volume and profits of manufacturing companies in Anambra State and beyond.

The findings also revealed that managers and owners of manufacturing companies in Anambra State did not differ significantly in their mean ratings on the extent of utilization of advertising as a marketing communication strategy. This means that the executives of the manufacturing companies irrespective of their status moderately utilized advertising as a marketing communication strategy. The findings also revealed that level of education of the respondents did not

significantly influence their extent of utilization of advertising as a marketing communication strategy.

The respondents inability to effectively utilize advertising as a marketing strategy could be as a result of lack of managerial empowerment and lack of adequate knowledge of the vital role of advertising. It therefore means that manufacturing companies wishing to survive in this present economic reality must utilize various advertising media in marketing their products. This would help to create wider markets for their products.

Conclusion

Based on the findings of this study, it is concluded that the extent of utilization of advertising as a marketing communication strategy by manufacturing companies in Anambra State was moderate for effective marketing of their products. The findings also revealed that managers and owners of manufacturing companies in Anambra State do not differ significantly in their mean ratings on the extent of utilization of advertising. This simply implies that the status of executives is not an influencing factor for the utilization of advertising and also that the level of education of the executives is not a major factor influencing the extent of utilization of advertising as a marketing communication strategy by manufacturing companies in Anambra State.

Recommendations

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

1. Business educators in tertiary institutions should be innovative in their instructional delivery by exposing their students to various marketing strategies which will enable the students to succeed when they eventually establish their own small and medium scale enterprises after graduation.
2. The management of manufacturing companies should update themselves through trainings and workshops which are often organized by relevant research institutes on product marketability.

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UTILIZATION OF INSTRUCTIONAL MATERIALS FOR TEACHING AND LEARNING OF BUSINESS STUDIES IN ANAMBRA STATE

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Abstract

The study determined the utilization of instructional materials in teaching and learning of business studies in secondary schools in Anambra State. Two research questions guided the study and two null hypotheses were. Descriptive survey research design was adopted for the study. The population of the study comprised 296 business subject teachers in all public secondary schools in Anambra State. A five point rating scale questionnaire which was validated by experts was used for data collection. Cronbach alpha was used to test the reliability of the instrument and reliability index of .82 was obtained. Data collected from the study were analyzed using mean and standard deviation to answer the research questions and ascertain the homogeneity of the respondents while Analysis of Variance (ANOVA) was used to test the hypotheses at 0.05 level of significance. The results showed that the business studies teachers seldomly utilized projected visual instructional materials and often utilized non-projected visual instructional materials in teaching. The findings further revealed that teachers did not differ significantly in their mean ratings based on years of experience. It was concluded that utilization of instructional materials by business studies teachers should help secondary school students acquire entrepreneurial skills that will enable them to be self-sufficient in the competitive world of work. Based on the findings, the researchers recommended, among others, that relevant authorities should organize seminars, in-service training, conferences and workshops for business studies teachers on the utilization of instructional materials for effective learning outcomes.

Introduction

Education is one of the leading instruments for promoting economic development as it encompasses processes individuals go through to help them develop and utilize their potentials. Education is a process that shapes the life of an individual, which, in turn, enhances the quality of members of any society and the universe as a whole. Teaching and learning are the major functions of schools. Teaching involves various activities and attempts that are geared towards changing the behaviour of a learner in a specific context. Paul (2006) explained that change could be in attitude, knowledge, idea, skill or appreciation. Effective teaching of any subject will not only stimulate students' interest in the subject but also enhance

their achievement in an examination. To achieve effective teaching and learning, there is need for availability and adequate utilization of instructional materials to be adequately available and utilized by teachers as they enable students grasp ideas better.

Instructional materials are the different teaching aids or apparatus which a teacher employs to facilitate teaching and achieve stated objectives. Agun in Emeasoba and Igwe (2016) defined instructional materials as those materials which are helpful to teachers and students to maximize learning in various areas. The unique role of instructional materials in classroom teaching and learning is enormous. This means that method of teaching will be grossly incomplete where instructional materials are not utilized. Aransiola in Eze (2011) identified instructional materials for teaching business subjects to include textbooks, manuals, workbooks, magazines, pictures, films, models, simulators and stationeries. They consist of print and non-print items such as kits, textbooks, magazines, newspapers, pictures and recording videos that make the teaching and learning process interesting especially in the teaching of business studies (Effiong & Igiri, 2015).

Business Studies is a dynamic subject which prepare students for the challenges of the 21st century by introducing them to the world of business and self-reliance. Business studies is integrated in nature which means that the subject is taught as a single subject with components. It is expository and discovery in nature which enable students to discover those skills and potentials that help individuals in future for life-long education. Hence, Umezulike and Okoye (2013) considered business studies as the key agent of economic and technological development either as a way of developing human capacity, increasing the shield of workforce for modernization, industrialization, and environmental development or as a matter of personal freedom and empowerment of the populace. According to Amoor (2010), business studies plays significant role in the economic development of the society by providing knowledge and skills to the learners, thereby, enabling them to adequately impart knowledge into others, and handle sophisticated office technologies and information systems. The goal of business studies is primarily to produce competent, skillful and dynamic business teachers, office administrators and businessmen and women that will effectively compete in the world of work. If these objectives will be achieved, then efforts should be made to provide adequate instructional materials to Nigeria junior secondary schools in teaching of Business Studies and to encourage its effective use.

The use of instructional materials in teaching of business studies is very important because it provides a concrete basis for conceptual thinking, motivates students to learn and captures their imagination if used correctly. Instructional materials provide the teacher with interesting and compelling platforms for conveying information since they motivate learners to learn more (Adekunle, 2008). Furthermore the teacher is assisted in overcoming physical difficulties that

could have hindered his effective presentation of a given topic. According to Akude (2004), the influence of instructional materials in promoting students academic performance is indisputable. The teaching of business studies in Nigeria secondary school needs to be properly handled. The materials used by teachers to teach and drive home their subject at the primary and secondary school levels of the education system are important in practical classroom interaction to successfully transfer knowledge from teachers to learners.

Despite the emphasis placed on the usefulness of instructional materials in the teaching and learning process, most students still find it difficult to cope with the study of business studies. One possible reason for this could be the non utilization of instructional materials that can easily convey the message of the lesson to the learners. Orji in Effiong and Igiri (2015) stated that teaching aid is the guidance of learning activities that a teacher uses to motivate and arouse students to learn. This implies clear that for effective learning to take place, students need to be properly guided by the teacher with concrete materials.

According to Bongotons and Onyenwe (2010), one of the pillars of a successful implementation of effective business teacher education is the adequacy and utilization of teaching and learning materials. These materials are in form of facilities and equipment needed to foster skill development and allow for standards and quality in products. Unfortunately, one of the major challenges facing the junior secondary schools and indeed business studies is inadequate teaching and learning resources.

Utilization of instructional materials is the act of using and applying the available instructional materials in the actual teaching/learning process. Where resources are supplied for instructional use, teachers are expected to utilize them to support a smooth and meaningful flow of instruction and promote understanding of the content being taught (Nwabunwanne, 2009). The teacher who uses instructional materials should be able to manipulate and operate the available units: They should be able to use them to meet the learning needs of the particular learning or group of learner's they are dealing with. This is why Okafor (2013) pointed out that effectiveness of learning materials is determined by the way they are manipulated by teachers or instructors.

Instructional materials are in various classes such as audio or aural, visual or audio visual. Audio instructional materials refer to those devices that make use of the sense of hearing only like radio, audio tape recording and television. Visual instructional materials are those devices that appeal to the sense of sight only such as the chalkboard, chart, slide and film strip. An audio-visual instructional materials is a combination of devices which appeal to the sense of both hearing and seeing such as television, motion picture and the computer (Isola, 2011). This study focused on the extent of utilization of these instructional materials in teaching and learning of business studies such as projected visual materials, non-projected materials and computer assisted instructional materials.

Projected visuals refer to media formats in which still images are projected onto a screen. Such projection is achieved by passing a strong light through transparent film (overhead transparencies, slides, and filmstrips), magnifying the image through a series of lenses, and casting the image onto a reflective surface (Reiser & Dempsey, 2006). Projected visuals are instructional materials that summarize information and ideas through overhead projector, computer images, sound slide sets, multi-image presentations, filmstrips and opaque projections. Patrick in Boor (2013) noted that most students are initially less familiar with projected visuals than they are with flat pictures. They are valuable means of communicating certain information and have generally been found to aid the teacher and the learner by providing visual, audio information. They are aimed at supplementing and improving teaching and learning.

The use of projected media attracts inputs from the teachers and the students; however, they are not intended to end the work of teachers. The use of projected media increases the rate of learning by providing worthwhile experiences for learners. According to Orji (2005), projected visuals give instruction a more scientific base through providing a framework for systematic instruction planning. The method required by the teacher to make the teaching of business studies effective demands that the teacher should be very resourceful. Instructional materials are to be used to serve and meet many of education needs if only educators can access and effectively utilize them. Meziobi (2003) revealed that the application of projected instructional visuals in teaching has been found to enhance instructions. Today, projected visuals are highly rated worldwide to be of great value in the teaching and learning process.

Non projected visuals are those aids which are used without any projection which translate abstract ideas into a more realistic format. They allow instruction to move from verbal representation to a more concrete level. Non-projected learning materials are not technological but are the very basic stuff that has been used in classrooms for years. Like printed and duplicated materials, Diaz (2015) observed that non- projected displays can be used in a wide range of teaching/ learning situations covering all three of the basic classes (mass instruction, individualized learning and group learning). Non-projected media include posters, cartoons, charts, pictures and graphs and what students produce by themselves can provide powerful visual support for learning abstract ideas. The non-projected media can be presented in the classroom or used as a part of a class activity (Bello, 2015). They are particularly helpful with objectives requiring identification of people, places or things.

The number of a teacher's years of teaching can experience influence the use of instructional media. For instance, personal familiarity with instructional media influences its implementation, Barnard (2007) reported that acquisition of computer skills is neither smooth nor linear and takes time and aspiration. Barnard

further explains that the more experienced a teacher is with any form of instructional media, the more the teacher will appreciate it and implement it practically in the field. Despite the obvious usefulness of instructional materials in the teaching and learning process, most teachers still find it difficult to cope with the teaching of business studies in schools. One wonders whether or not they use relevant instructional materials, hence this study to determine the utilization of instructional materials in teaching and learning of business studies in secondary schools of Anambra State.

Purpose of the Study

The main purpose of the study was to determine the level of utilization of instructional materials for teaching and learning of business studies in public secondary schools in Anambra State. Specifically the study determined the level of:

1. utilization of projected visual instructional materials in teaching and learning of business studies in public secondary schools in Anambra State.
2. utilization of non- projected visual instructional materials in teaching and learning of business studies in public secondary schools in Anambra State.

Research Questions

The following research questions guided the study:

1. What is the level of utilization of projected visual instructional materials for the teaching and learning of business studies in public secondary schools in Anambra State?
2. What is the level of utilization of non-projected visual instructional materials for the teaching and learning of business studies in public secondary schools in Anambra State?

Hypotheses

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

1. Teachers will not differ significantly in their mean ratings on the level of utilization of projected visual instructional materials in teaching and learning of business studies in public secondary schools of Anambra State based on years of experience.
2. Teachers will not differ significantly in their mean ratings on the level of utilization of non-projected visual instructional materials in teaching and learning of business studies in public secondary schools of Anambra State based on years of experience.

Method

The design adopted in this study was a descriptive survey. According to Nworgu (2015), a survey research design is the one which aims at collecting data and describing in a systematic manner the characteristics, features or facts about a given population. The study was carried out in Anambra State which is made up of 21 Local Government Areas with a good number of public secondary schools distributed in six education zones, namely Aguata, Awka, Nnewi, Ogidi, Onitsha and Otuocha education zones. The population of this study comprised 296 business subject teachers in all public secondary schools in Anambra State. There was no sample because the population was manageable. The instrument for data collection was a questionnaire titled “Availability and Utilization of Instructional Materials in Teaching and Learning Questionnaire (AUIMTLQ)”. The questionnaire was structured on a five point rating scale of Always Utilized (AU), Often Utilized (OU), Somewhat Utilized (SU), Seldom Utilized (SU) and Not Utilized (NU). The questionnaire was subjected to face validation by three experts in business education. Using Cronbach alpha to ascertain the internal consistency of the instrument, coefficient values .81 and .83 were obtained for the two clusters with overall reliability value of .82. The researchers personally administered the questionnaire with the help of six research assistants who were assigned to each of the education zones. Out of the 296 copies of the questionnaire administered, seven were incompletely filled and six were not returned. Thus, 283 copies (representing 95.61%) were retrieved with an attrition rate of seven (representing 4.39%). The data collected from the study were analyzed using descriptive statistics of mean and standard deviation to answer the research questions while one way analysis of variance (ANOVA) was employed to test the two null hypotheses at 0.05 level of significance. Where the calculated p-value was less than the stipulated level of significance (0.05), it means that there was significant difference and the hypothesis was rejected. Conversely, where the calculated p-value is equal to or greater than the stipulated level of significance (0.05), it means that there was no significant difference and the hypothesis was accepted.

Results

Table 1: Respondents’ mean ratings on the level of utilization of projected visual instructional materials for the teaching and learning of business studies in public secondary schools in Anambra State

S/NO	Projected Visual Materials	\bar{X}	SD	Remark
1.	Use of opaque projectors to demonstrate to students	2.11	.54	Seldomly utilized
2.	Use of slides in presenting business studies lesson	1.70	.46	Seldomly utilized
3.	Use of film strips to summarize information and ideas	1.60	.49	Seldomly utilized
4.	Use of overhead projector to demonstrate a lesson	1.70	.46	Seldomly utilized
5.	Use of slide projectors to present charts and graphs	1.70	.46	Seldomly utilized
6.	Use of video materials to illustrate how to post business transactions in accounts book	2.70	.46	Somewhat utilized
7.	Using animation to enable students to learn faster and easier	2.60	.49	Somewhat utilized
8.	Use of LCD panels to present a common image to students	1.70	.46	Seldom utilized
9.	Use of computer images to design learning experiences	2.60	.49	Somewhat utilized
10.	Use of motion pictures in presenting their lesson in office practice	2.80	.40	Somewhat utilized
	Cluster Mean	2.12		Seldomly utilized

Analysis in Table 1 shows a cluster mean of 2.12 which indicates that teachers’ seldomly utilized projected visual instructional materials in teaching business studies in secondary schools in Anambra State. The item by item analysis indicates that items 6, 7, 9 and 10 with the mean scores ranging from 2.60 to 2.80 are the projected visual instructional materials somewhat utilized while items 1, 2, 3, 4, 5 and 8 with mean scores ranging from 1.60 to 2.11 are the projected visual instructional materials seldom utilized. The standard deviations of 0.40 to 0.54 are within the same range showing greater consensus of opinion.

Table 2: Respondents' mean ratings on the level of utilization of non-projected visual instructional materials for the teaching and learning of business studies in public secondary schools in Anambra State

S/NO Non-projected visual Materials	\bar{X}	SD	Remark
11. Use of still pictures for photographic representation of people, places and things	3.29	.46	Somewhat utilized
12. Use of drawings for displaying a lesson	3.49	.50	Somewhat utilized
13. Use of charts in presenting pictorial pictures	4.71	.45	Always utilized
14. Use of graphs to communicate a message to a viewer	3.50	.50	Often utilized
15. Use of field trip to learn practical skills in book keeping	3.42	.49	Somewhat utilized
16. Use of graph in presenting accounts format	2.59	.49	Somewhat utilized
17. Use of computers to aid in lesson preparation	3.61	.49	Often utilized
18. Use of flash cards to display a lesson	2.69	.46	Somewhat utilized
19. Use of maps to aid in copying of note	4.28	.65	Often utilized
20. Use of catalogue to present business information to the students	4.69	.46	Always utilized
Cluster Mean	3.63		Often utilized

Table 2 shows a cluster mean of 3.63 which reveals that teachers often utilized non projected visual instructional materials in teaching of business studies in secondary schools in Anambra State. The item by item analysis indicates that items 13 and 20 with the mean scores ranging from 4.69 to 4.71 are the non-projected visual instructional materials always utilized by business studies teachers while items 14, 17 and 19 with the mean scores ranging from 3.50 to 4.28 are the non-projected visual instructional materials often utilized by business studies teachers. Items 11, 12, 15, 16 and 18 with the mean scores ranging from 2.59 to 3.49 are the non-projected visual instructional materials somewhat utilized by business studies teachers. The standard deviations of 0.45 to 0.65 are within the same range showing that the respondents were not wide apart in their ratings.

Table 3: ANOVA summary of the respondents mean ratings on the level of utilization of projected visual instructional materials in teaching and learning of business studies in secondary schools of Anambra State based on years of experience.

	Sum of Squares		df	Mean Square	F	P-value	Decision
Between Groups	1	2	0.5		0.214	.807	Not significant
Within Groups	671.1	280	2.4				
Total	672.1	282					

Data analysis in Table 3 shows that teachers do not differ significantly in their mean ratings on the level of utilization of projected visual instructional materials in teaching and learning of business studies in secondary schools of Anambra State based on years of experience. This is shown by the p-value of .807, which is greater than the significant level of 0.05. The null hypothesis of no significant difference between the three groups is therefore accepted.

Table 4: ANOVA summary of the respondents mean ratings on the level of utilization of non-projected visual instructional materials in teaching and learning of business studies in secondary schools of Anambra State based on years of experience.

	Sum of Squares		df	Mean Square	F	P-value	Decision
Between Groups	8.8	2	4.4		1.277	.280	Not significant
Within Groups	961.3	280	3.4				
Total	970.0	282					

The analysis in Table 4 shows that teachers do not differ significantly in their mean ratings on the level of utilization of non-projected visual instructional materials in teaching and learning of business studies in secondary schools of Anambra State based on years of experience. This is shown by the p-value of 1.277, which is greater than the significant level of 0.05. The null hypothesis of no significant difference between the three groups is therefore accepted.

Discussion

Results of the study revealed that business studies teachers seldomly utilized projected visual instructional materials in teaching business studies in secondary schools in Anambra State. This implies that instructional materials were seldomly utilized by business studies teachers. The findings corroborate that of Boor (2013) who revealed that one way to solve this problem of poor performance

of students is in the constant use of instructional materials such as still visuals in every lesson. The research has confirmed that the use of projected still visuals arouse and sustains interest and makes student more involved in a lesson. The end results of these are better learning and better performance. This is because projected still visual facilitates and enhance effective understanding of concept eluding the teaching and learning process. It also leads to creative thinking and mastering of the subject taught. In support of this, Inyiagu (2015) stated that projected visual instructional materials help students to hear and see better because media are straight-forward image which enhance student's perception and improved their academic performance when devices such as audio, appliers or over head projectors in large classes to help students see or hear better. Testing of the first hypothesis revealed that business studies teachers did not differ significantly in their mean ratings on the utilization of projected visual instructional materials in teaching and learning of business studies in secondary schools of Anambra State based on years of experience. It followed therefore, that the null hypothesis of no significant difference was not rejected. This agrees with the findings of Boor (2013) who stated that there was no significant difference on the utilization of instructional materials.

Results of the study also revealed that business studies teachers often utilized non-projected visual instructional materials in teaching business studies in secondary schools in Anambra State. The findings of the study are in consonance with that of Bello (2015) who stated that non-projected media can make one's instruction more realistic and engaging. Posters, cartoons, charts, pictures and graphs and what students produced by them can provide powerful visual support for learning abstract ideas. Similarly Makanya (2015) stated that lack of wall charts, models, and other conventional media to complement the use of chalkboards and textbooks in the schools is making it difficult for teachers to offer quality teaching to promote high academic achievement for secondary school students. The study further revealed that teachers did not differ significantly in their mean ratings on the level of utilization of non-projected visual instructional materials in teaching and learning of business studies in secondary schools of Anambra State based on years of experience. This disagrees with the findings of Ode (2014) who reported a significant difference on the utilization of audio-visual instructional materials in teaching and learning. This implies that the use of instructional materials have significant impact on the teaching and learning in secondary schools.

Conclusion

Based on the findings of this study, the researchers concluded that the issue of utilization of instructional materials for business studies instruction in public secondary schools in Anambra State has not been properly addressed. Utilization of instructional materials (projected and non-projected visual) by business studies

teachers is essential for acquiring timely, current and up-to-date information necessary for students academic excellence. This would not only assist them to have full mastery of their subject areas of specialization but would enable them to face the challenges in the society.

Recommendations

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

1. Seminars/workshops/conferences should be organized by the regulatory authorities regularly for school principals and teachers on the importance of instructional materials in the attainment of educational objectives. In such programmes, they should be exposed to various kinds of instructional materials with regards to how and where they can be produced, collected and utilized.
2. School administrators should supervise and monitor teachers to ensure that instructional materials are used during classroom instruction.
3. There should be strict monitoring and supervision of school administrators by the required supervisory authorities on the management of funds meant for purchasing and maintenance of instructional materials so as to avoid mishandling of such funds through diverting it to other expenditures within the school or elsewhere.

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BUSINESS SUBJECT STUDENTS' PERCEIVED BENEFITS OF UTILIZATION OF LIBRARY RESOURCES IN SECONDARY SCHOOLS IN OGIDI ZONE, ANAMBRA STATE

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Abstract

The need to encourage students' utilization of library resources for better academic performance necessitated this study. The study ascertained the benefit of utilization of library resources as perceived by business subjects' students in secondary schools in Ogidi zone, Anambra State. Descriptive survey research design was adopted for the study. The population consisted of 3577 business subject students and a sample size of 520 was drawn for the study using stratified random sampling technique. One research question guided the study and two null hypotheses were tested. An 11- item structured questionnaire validated by three experts was used for data collection. The reliability of the instrument was established using test re-test method and data analyzed using Pearson Product Moment Correlation Coefficient; this yielded reliability coefficient of 0.83. Data were analyzed using mean and standard deviation to answer the research question and to determine the closeness of the respondent's means, while z-test was used to test the null hypotheses at 0.05 level of significance. The results revealed that business subject students in secondary schools in Ogidi zone, Anambra State agreed that library resources help students to use and cite materials accurately. The students strongly agree that library resources offer an environment that is conducive for study. It was found that the business subject students did not differ significantly on their mean responses on the benefit of utilization of library resources in secondary schools based on gender and location of the school libraries. It was recommended among others that management of secondary schools in Anambra State should organize seminars and workshop programs to enlighten student on the relevant and the use of library resources. This will help in enhancing the usage of library resources among students and improve their academic performance.

Key Words: Benefits, utilization, library, resources and Business subject students

Introduction

Education is the key factor in the development and advancement of a society. No society can afford to toy with the education of its citizens as this could be detrimental to development. Education is generally seen as an aggregate of all the

processes by which a child or young adult develops abilities, attitudes and other forms of behaviours which are of value to the society in which he lives. Secondary education is the form of education children receive after primary education and before the tertiary level. The broad aims of secondary education according to the Federal Republic of Nigeria (FRN, 2013) are preparation of students for useful living within the society and for higher education. It inspires the desire for self-improvement and achievement, producing citizens who can think and respect the views of others. Secondary education has a diversified curricular to cater for all students and provide a sub-professional manpower in science, technical knowledge and vocational skills.

Okoye and Udouo (2015) noted the major areas of skill acquisition in secondary education to include business studies, basic technology, practical agriculture, home economics and computer studies. At the senior secondary level, each of the integrated subjects is split into many distinct subjects. For instance, business studies are further split to book keeping, financial accounting, commerce, office practice and economics. Business subjects as an integral part of general education is concerned with education for and about business (Okoli & Ibeh, 2017). The broad aim of offering these subjects is to produce highly skilled manpower required for the growing commercial enterprises in the country. To implement and achieve this, provisions of different types of educational resources to the students are very important. Such educational resources required include human resources, library resources and infrastructure to facilitate effective teaching and learning of the different business subjects. The aim of business subjects will equally be defeated where such resources like library resources are made available but not adequately utilize.

To utilize means the ability to make practical use of something. This is the process of making use of something available. Utilization as used in this study establishes the fact that library resources are already available but determines the resources been put into appropriate use by the student. Ezenwa (2009) noted that the effectiveness of a library does not depend on only its collection in terms of resources and other facilities per se, but also on the success of its exploitation and use. The students use library resources and services to supplement their class notes, assignments and in examination preparation. Adequate use of school library is a key to high academic performance.

Utilization of library resources assists teaching-learning processes when instructional materials such as textbooks, audio-visual materials, magazines, newspapers, journals and reference materials are stored. It is the function of the library to support the school curriculum by providing up-to-date information to keep teachers and students abreast of new developments (Moruf, 2015). Library resources promote the development of reading skills and encourage long-term learning habits through reading, listening and viewing a variety of materials. According to Strangin Okoli and Nwajei (2019) students can access a vast array of

resources and use a wide range of books, journals, databases and other resources that will support and be of benefit to their academic efforts. The library is a powerhouse of the school and an integral part of the school system.

The availability and proper use of library resources has proved to be worthwhile in enhancing academic performance among secondary school students in different subject areas. Students of business subjects are expected to benefit a lot from usage of their school library resources. Unfortunately, these resources are seen available in secondary schools in Anambra State but seems not properly used by students generally including those studying business subjects. This could be that the students are not aware of the numerous benefits accruing to the use of library resources and those that are aware of the numerous benefits are not knowledgeable of how to explore the library for academic excellence. Popoola (2013) observed that in most secondary schools, library resources are either unavailable or poorly used which causes poor students performance and failures in internal and external examinations. Supporting this, Jato, Ogunniyi and Olubiyo (2014) noted that irregular use of school libraries by students was one of the causes of their poor scores in tests and examinations. In addition, Fakomogbon, Bada and Omiola (2012) observed that lack of standard school library with relevant information resources which students could use for their studies could be one of the causes of mass failure in the school. However, the major problem is poor utilization of the available library resources.

Students poor utilization of library resources in schools will continue to limit their investigation skills, as well as narrow their horizons and reading culture. The usefulness of any school library resource depends on its maximum usage by students otherwise it is as good as wasted. The school library is an important tool in the school system that supports the curriculum and helps schools to achieve educational objectives and goals. The school library serves these purposes by providing resources that encourage self-development among students who use them.

The influencing factors on the benefit of utilization of library resources by business subject students in secondary schools could be gender and location. Gender in this study means the physical attributes of a person as a male or female. It is possible that the male and female business subjects' students may differ in their opinion regarding benefits of utilization of library resources in secondary schools in the area of the study. For instance, Daramola (2013) stated that male students visit the library more frequently than female students. Daramola also noted that low intensity of library visits among females might be as a result of their perception of the library and the difficulty in combining academic work with home chores. Similarly, location in this study means the particular area in the schools where the library is built whether at the centre of the school or outskirts of the school/classroom. Ajayi and Ogunyemi (2011) reported that location of the library does have an influence on its use. Where the library is located at the outskirts of

the school premises, students may find it difficult to use the resources because the location is not easily accessible. School library resources are of no value to students of business subjects if they are not appropriately utilized. It is on this backdrop that this study was conceived to ascertain the benefits of utilization of library resources by business subject students in secondary schools in Ogidi zone, Anambra State.

Purpose of the Study

The purpose of the study was to ascertain the benefits of utilization of library resources to business subject students in secondary schools in Ogidi zone, Anambra State.

Research Questions

What are the benefits of utilization of library resources to business subject students in secondary schools in Ogidi zone, Anambra State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance

1. There is no significant difference in the mean responses of male and female business subject students on the benefits of utilization of library resources in secondary schools in Ogidi zone, Anambra State.
2. There is no significant difference in the mean responses of business subject students on the benefits of utilization of library resources in secondary schools in Ogidi zone, Anambra State based on location (center and outskirt).

Review of Related Literature

Arua and Chinaka (2011) sees school library resources as all inputs which are made available in the school library, to provide good learning environment for students and teachers so as to be able to achieve educational goals. This variety of library resources are essential to facilitate the school library fulfilling its functions among which are: the provision of resources necessary for the school's educational programmes and, to help in improving the reading skills and learning habits of students. Achebe (2008) asserted that continuous use of library resources has positive multiplier effect on the academic performance and self-development of its user. The use of library resources can appeal to the individual attention by creating interest goal that will help the learner achieve direct effort.

Library resources are the materials in the library that make information-related services possible. These resources embody books, journals, newspapers, magazines, thesis, reports, government publications among others (Odu, 2016). Library resources manifest either in print or in electronic format. Aguolu and Aguolu (2012) also noted that libraries provide instructional materials to enrich the

curriculum and give unlimited opportunities for students' learning. An effective school library at secondary school level gives foundation for self-education necessary for facing challenges of higher education.

Haycock (2008) noted that in schools with good library resources, students perform significantly better on tests for basic research skills, reading comprehension and in their ability to express ideas effectively in relation to their reading. More reading occurs when there is a school librarian, as the guidance of a teacher librarian appears to exert significant influence on student achievement in information-gathering. In schools with good libraries and full-time librarians, students perform better at higher levels in reading comprehension, and in knowledge and use of reference materials than students in schools with minimal or no library service. Edoka (2010) noted the benefit of school library resources in academic performance of students to include support and reinforcement of learning of school core subjects' content by students, carrying out school assignment always, improve knowledge on the course of study and the students keeping up with current affairs. Others are improved self-concept to students and research for specific topics of interest among others.

Method

The study employed descriptive survey research design. The study was carried out in Ogidi Education zone of Anambra State. The population of this study consisted of all the students offering business subjects' in SSSI to SSSIII in 37 secondary schools in Ogidi Education zone. There are 3577 business subject students from (SSSI 1515, SSSII 1179 and SSSIII 883) in secondary schools in Ogidi zone. A sample of 520 students was used for the study using stratified random sampling technique. Data for this study was collected using a validated structured questionnaire on a 4-point rating scale of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). The reliability of the instrument was established through test retest method. The data for the reliability were analyzed using Pearson Product Moment Correlation Coefficient and a reliability coefficient of 0.83 was obtained.

The research instrument was administered to the respondents with the help of three research assistants. Out of the 520 copies of the questionnaire distributed, 497 copies (representing 94 percent) were duly completed, retrieved and used for data analysis. Data collected were analyzed using mean and standard deviation to answer the research questions and determine the closeness of the respondents' mean ratings respectively. Hypotheses were tested using z-test statistical tool at 0.05 level of significance. Decisions on the items rated were based on the real limit of numbers for the weighted means as follows:

Responses	Rating Scale	Real Limits of Number
Strongly Agreed (SA)	4	3.50 – 4.00
Agree (A)	3	2.50 – 3.49
Disagree (D)	2	1.50 – 2.49
Strongly Disagree (SD)	1	1.00 – 1.49

Results

The results are presented in Tables 1 to 3 as follows:

Research Question: What are the benefits of utilization of library resources to business subject students in secondary schools in Ogidi zone, Anambra State?

Table 1: Mean ratings on the benefits of utilization of library resources by business subject students in secondary schools in Anambra State.

S/No	Benefits of library resources	Mean	SD	Decision
1.	Library resources support and reinforces the learning of school core subjects' content	3.70	0.46	Strongly agreed
2.	Library resources enable students carrying out school assignment always	3.76	0.43	Strongly agreed
3.	Library resources improve students' knowledge on the course of study	3.31	0.46	Agreed
4.	Library resources keep students abreast with current affairs	3.29	0.45	Agreed
5.	Library resources improve one self-concept	3.27	0.44	Agreed
6.	Library resources help students to research for specific topics of interest	3.35	0.48	Agreed
7.	Library resources have total development of the students and enlarges their knowledge	3.33	0.47	Agreed
8.	Library resources help students to interact directly with resources	3.75	0.43	Strongly agreed
9.	Library resources help students to acquire information and develop research skill for lifelong learning	3.40	0.49	Agreed
10.	Library resources help students to use and cite materials accurately	3.36	0.48	Agreed
11.	Library resources offers an environment conducive to study	3.76	0.43	Strongly agreed
Cluster Mean		3.48		Agreed

The item by item analysis in Table 1 shows that out of 11 items rated, four were strongly agreed and seven items were agreed. However, the cluster mean of 3.48 revealed that business subject students in Ogidi zone, Anambra State agreed on the benefits of utilization of library resources in schools. The standard deviation shows homogeneity amongst responses indicating a consensus of opinion.

Hypothesis 1: There is no significant difference in the mean responses of male and female business subject students on the benefits of utilization of library resources in secondary schools in Ogidi zone, Anambra State.

Table 2: z-test analysis on mean ratings of the male and female business subject students on the benefits of usage of library resources in secondary schools in Anambra State

Gender	N	\bar{X}	SD	Df	P-value	Decision
Male	105	3.47	0.20	495	0.27	Not significant
Female	392	3.48	0.19			

Data in Table 2 show that there is no significant difference in the mean ratings of male and female business subject students in secondary schools in Ogidi zone, Anambra State. This is shown by the p-value of 0.27 which is greater than the significance level of 0.05. The null hypothesis is therefore not rejected.

Hypothesis 2: There is no significant difference in the mean responses of business subject students on the benefits of utilization of library resources in secondary schools in Ogidi zone, Anambra State based on location (center and outskirts).

Table 3: The z-test analysis on mean ratings of business subject students on the benefits of usage of library resources in secondary schools in Anambra State based on location.

Benefits of library resources	N	\bar{X}	SD	Df	P-value	Decision
Center	163	3.48	0.19	495	0.99	Not significant
Outskirt	334	3.48	0.19			

The data analysis in Table 3 shows that there is no significant difference in the mean ratings of business subject students in secondary schools in Anambra State on the benefits of usage of library resources based on location (center and outskirts of the school). This is shown by the p-value of 0.99, which is greater than the significance level of 0.05 at 495 degree of freedom. The null hypothesis is therefore not rejected.

Discussion of Findings and Implications of the Study

The findings of this study revealed that business subject students' in secondary schools in Anambra State strongly agreed that the benefits from utilization of library resources include support and reinforcement of the learning of school core subject contents, carrying out of school assignment always, direct interaction with resources and offer a conducive environment for study. They also

agreed that utilization of library resources improves their knowledge of the course of the study, improves one's self concepts, helps them in research of specific areas of interest to acquire information and to develop skills for lifelong learning. Others are that library resources keep them abreast of current affairs, it develops and enlarges their knowledge and help them to use and cite materials accurately. These findings are in line with that of Edoke (2010) and Haycock (2008) who stated that in schools with good library resources, students perform significantly better in tests for skills in reading comprehension, in ability of expression of ideas and basic research skills. This is also in consonance with Olagunju and Abiola (2008) who noted that the usage of library resources in teaching brings about fruitful learning, since it stimulates students sense of reasoning as well as in motivating them.

The findings of the study also revealed that the business subjects' student did not differ significantly in their mean ratings on the benefits of utilization of library resources in secondary schools in Ogidi zone, Anambra State based on gender and location. Male and female business subject students with library at the centre and those at the outskirt did not differ significantly in their view on the benefit of utilization of library resources.

The findings of this study have some educational implications for teachers and students in secondary schools offering business subjects. Business subject students are expected to benefit since it would help to educate them on the relevance and how best to use the school library. The teachers would also use these findings to make their students use the library frequently and help students to redirect their focus in ways that could lead to solving difficult problems in business subjects using library resources. This also implies the school management creating a school timetable and classroom environment that encourages students access to a vast array of resources and wide range of books, journals, database and other resources that will support and be of benefit to their academic efforts through the library.

Conclusion

Library resources is worthwhile in enhancing academic performance of secondary school students in business subjects as it provides them access to a vast array of resources and wide range of books, journals, database and others that will support and be of benefit to their academic efforts. The benefit of utilization of library resources in secondary school is embracing for all persons whether male or female and not minding where the library is located.

Recommendations

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

1. Management of secondary schools in Anambra State should organize seminars and workshop programs to enlighten student on the relevant and the use of library resources. This will help in enhancing their usage of library resources.
2. Teachers should motivate students to use library resources by giving assignment that enhances student consultation of library resources.
3. Management of secondary schools in Anambra State should equip their school libraries to improve academic performance of students. This is possible with joint funding programme by the government, school authority and the community in provision of functional library across the state. This synergy approach will improve the academic achievement of the students in business studies.

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EXTENT OF AVAILABILITY AND UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY RESOURCES IN BUSINESS EDUCATION PROGRAMME OF COLLEGES OF EDUCATION IN DELTA STATE

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Abstract

The study examined the extent of availability and utilization of information and communication technology resources in business teacher education programme of colleges of education in Delta State, Nigeria. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The study adopted descriptive survey design. The entire population of 114 business education lecturers in all the four colleges of education in Delta State was used for the study without sampling. Data was collected for the study through direct observation by the researcher using NCCE benchmark and administration of a validated questionnaire on the respondents. The reliability of the questionnaire was established using Cronbach Alpha formula which yielded a reliability coefficient of 0.801. Frequency count and simple percentage were used to answer research question one and mean and standard deviation were used to answer research question two. t-test statistic was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed that ICT resources as stipulated by the benchmark of NCCE for business education programmes were not available in colleges of education in Delta State. Business educators' rarely utilized ICT resources in business teacher education programmes in colleges of education in Delta State. The study further disclosed that business educators in colleges of education did not differ significantly in their mean ratings on the extent of utilization of ICT resources in business education programmes based on institutional ownership and location. The study concluded that the inadequacy and low level of utilization of ICT resources by business educators will negatively affected the technological competencies of business education students to succeed and carve a niche of their own in the digitalized business world. It was recommended among others that management of colleges of education should enter into partnership with ICT manufacturing organizations to assist in improving the supply of ICT resources in business education programme. This is to enhance

business education students' academic performance and boost the quality assurance indices of the programme.

Keywords: Information communication technology Resources, business education, business educators, availability and utilization

Introduction

Education is an instrument for social, economic, cultural and political development. The development of any nation depends largely on the quality of education of her citizens. There are many educational programmes in Nigeria, and business education, is one of the programme options in Vocational and Technical Education that facilitates self-empowerment objectives of the nation (Oluwasina & Onokpaunu, 2018). Business education programme is an important part of general education which emphasizes skills and competency acquisition for use in offices and business related occupations (Okoli, 2010). Onojetah (2012) averred that business education which is offered in universities and colleges of education is concerned mainly with the development of relevant and saleable skills and knowledge that would enable an individual to function effectively in the world of work.

Business education programme as obtained in colleges of education, is designed to produce both high level manpower and middle level manpower. This is made possible because colleges of education when affiliated with universities have the capacity to award bachelor degree in education and Nigerian Certificate of Education. The objectives of business education in colleges of education as outlined by the National Commission for Colleges of Education (2012:18) include; to produce well qualified and competent NCE graduates in business subjects who will be able to teach business subjects in the secondary schools and other related educational institutions; to produce NCE business teachers who will be able to inculcate the vocational aspects of business education into the society; to produce NCE business teachers who will be involved in the much desired revolution of vocational development right from primary and secondary schools; to equip students with necessary competencies so as to qualify them for a post-NCE degree programme in business education and to equip graduates with the right skills that will enable them to engage in a life of work in the office as well as for self-employment.

In order to achieve the aforementioned objectives of business education in colleges of education, the availability and utilization of Information and Communication Technology (ICT) resources cannot be over-emphasized. Thus, Bupo (2011) averred that ICT helps to expand access to education, strengthened the relevance of education to increasingly digital workplace and raises educational quality by making teaching and learning processes more engaging to real life practices. Information and Communication Technology (ICT) resources refers to

equipment or interconnected system or subsystem of equipment that is used in the management, movement, control, display, switching, interchange, transmission or reception of data (Eze & Okorafor, 2013). According to Yusuf in Oguzor (2011), Information and communication technology resource is defined as computer-based tools used by people to work in the information and communication processing aspects of an organization. Thus, it has become a pertinent tool for effective teaching and learning in tertiary institutions.

The National Commission for Colleges of Education (2012) recommended that information and communication technologies should be made compulsory for effective and efficient teaching and learning of business education programme in colleges of education. In agreement, Onokpaunu (2016) asserted that ICT resources improve business education lecturers' instructional productivity, reduces their clerical workload of record keeping and assists them in presenting information and instruction for students' usage. Therefore, to achieve the objectives of business education programme in colleges of education, ICT resources must be available and utilized for instructional delivery.

Availability refers to the quality of being able to be reached or used. It is the degree to which a system, subsystem or equipment is in a specific operable and committable state at the start of a mission can be reached and used. In the context of this study, availability refers to the extent information and communication resources such as laptops, desktop computers, projectors, printers, scanning machine, internet facilities and so on are accessible for teaching and learning of business education programme in colleges of education (Egbri, 2012).

The availability of ICT resources in educational settings demands effective utilization. In the opinion of Ezenwafor, Onokpaunu and Nwadiuko (2017), utilization entails effective usage of assets, inputs and raw resources to achieve desirable outcomes. Ezenwafor, Onokpaunu and Nwadiuko further defined utilization as the process of putting facts, objects and ideas into specific practice. Utilization, according to Sabba (2009) is the extent to which a given group uses particular services in a specified period. Similarly, Azuka (2009) saw utilization as the act of using something. Hornby in Ugwuanyi (2013) explained utilization as to make use of available services at the individual's disposal. Therefore, utilization in the context of this study refers to the rate or how often ICT resources are put into use by business educators in colleges of education.

Business educators are specialized teachers who have undergone professional training in teacher education programme equipped with the pedagogical competence to teach business subjects in educational institutions. Osuala in Ebele, Onokpaunu and Ikononwan (2018) asserted that a business educator is any person who plays a critical role in making business education viable and visible in the community; plays the critical role of agent of change in business education, delivers high quality instruction in business education and is able to identify problems facing teaching and learning in the field as well as

speculate solutions to such problems. In order to ascertain the availability and utilization of information communication and technology resources in business education programme of colleges of education, variables such as institutional ownership and location of business educators are taken into consideration in this study.

In the context of this study, institutional ownership means colleges of education owned and controlled by the federal and state governments. In the same vein, location refers to the siting of colleges of education in Delta State. The researchers are of the view that ICT resources would be rare at the disposal of business educators in federal colleges of education than their colleagues in State colleges of education. However, this assertion needs to be supported by empirical evidence. Given the disparity of development between urban and rural areas, one may assume that ICT resources in colleges of education sited in urban areas would be readily available and utilized than their counterparts in rural areas. Similarly, this assertion needs to be supported by empirical evidence. As a result of this uncertainty, the researchers are motivated to determine the availability and extent of utilization of information communication and technology resources in business education programme of colleges of education in Delta State.

Statement of the Problem

Information communication and technology was introduced into business education programmes by the National Commission for Colleges of Education to enrich the programme in order to meet the needs of learners and the society. Despite this effort, Agboola in Okoro (2013) observed that many NCE business education graduates in different establishments still find it difficult to utilize various computer-based technologies in carrying out their office responsibilities. From close observation by the researchers, business education graduates do not seem to show adequate competency in information and communication applications in their places of work in Delta State. One argument push for this ugly situation is based on the status of availability and extent of utilization of ICT resources in business education programme which do not seem to be clearly known in colleges of education in Delta State. Therefore, against this backdrop, this study sought to determine the availability and extent of utilization of ICT resources in colleges of education in Delta State.

Purpose of the Study

The purpose of this study was to determine the availability and extent of utilization of ICT resources in business education programmes in colleges of education in Delta State. Specifically, the study determined:

1. Information communication and technology resources that are available to business teacher education programmes in colleges of education in Delta State
2. The extent of utilization of information communication and technology resources by business educators in colleges of education in Delta State

Research Questions

This study was guided by the following research questions. What are the opinions of business educators with regards to what;

1. ICT resources are available in business teacher education programmes in colleges of education in Delta State?
2. Extent do business educators utilize available ICT resources in business teacher education programmes in colleges of education in Delta State?

Hypotheses

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

1. Business educators in federal and state colleges of education in Delta State do not differ significantly in their mean ratings on the extent of utilization of ICT resources
2. Business educators in colleges of education in Delta State do not differ significantly in their mean ratings on the extent of utilization of ICT resources as a result of their location (urban and rural areas)

Method

This study adopted descriptive survey design. The study was conducted in Delta State. The entire population of 114 lecturers in business education departments in colleges of education in Delta State was studied without sampling. The National Commission for Colleges of Education benchmark inventory for instructional resources in business education programme and a validated questionnaire were used for data collection. The National Commission for Colleges of Education benchmark inventory dealt with recommended quantity of ICT resources in business education, while the questionnaire measured the extent of utilization of ICT resources by business educators.

The NCCE Benchmark inventory was not subjected to reliability and validity procedures because the checklist (instrument) was already validated and standardized by NCCE. A pilot test was conducted to establish the reliability of the questionnaire by administering it to 20 business educators in Edo State which were not part of the study and Cronbach's alpha was used to measure the internal consistency which yielded an overall reliability co-efficient of 0.801. Data were collected for the study through direct observation by the researchers using NCCE benchmark and administration of validated questionnaire on the respondents. Frequency count and simple percentage were used to answer research question one

and mean and standard deviation were used to answer research question two. T-test statistic was used to test the hypotheses at 0.05 level of significance. An hypothesis was accepted where the p-value is equal to or greater than the alpha level of 0.05 ($p > 0.05$), at a degree of freedom; otherwise, the null hypothesis was rejected. The analysis was carried out using SPSS version 23.0.

Results

Research Question 1: What ICT resources are available in business teacher education programmes in colleges of education in Delta State?

Table 1: ICT Resources Available in Business Teacher Education Programme

S/N	ICT Resources	BM	Agbor	Warri	Mosogbar	Asaba
			A	A	A	A
1	Electronic Typewriters	35	3	5	2	2
2	Photocopiers	1	1	1	1	1
3	Computers	30	45	38	33	53
4	Telephone	1	0	0	0	0
5	Fax Machine	1	0	0	0	0
6	Scanner	1	0	0	0	0
7	Slide projector	1	1	1	1	1
8	Colour TV	1	1	1	1	1
9	Video machine	1	0	0	0	0
10	Video CD/DVD	1	0	0	0	0
11	Digital camera	1	0	0	0	0
12	Computer printer	1	1	1	1	1
13	Compact Disc	1	1	1	1	1
14	Microfilm	1	0	0	0	0
15	Overhead projector	1	1	1	1	1

Note. BM = Benchmark, A = Available

Data in Table 1 show that out of 15 items on ICT resources listed, seven are available for teaching in business education programmes in colleges of education in Delta State. The available ICT resources are photocopiers, computers, slide projector, colour television, computer printers, compact disc and overhead projectors. The Table further discloses that eight ICT resources listed are not available for teaching in business education programmes in colleges of education in Delta State. The remaining eight ICT resources not available are electronic typewriters, fax machine, scanners, video machine, telephone, video CD/DVD, digital camera and microfilm. On the whole, ICT resources as stipulated by the benchmark of NCCE for business education programmes are not available in colleges of education in Delta State.

Research Question: To what extent do business educators utilize available ICT resources in business teacher education programmes in colleges of education in Delta State?

Table 2: Business educators' mean rating on their extent of utilization of ICT resources

S/N	ICT Utilization	Mean	SD	Remark
1	Electronic typewriters	2.23	0.64	Rarely Utilized
2	Photocopiers	2.10	0.87	Rarely Utilized
3	Computers	2.95	0.95	Moderately Utilized
4	Telephone	1.65	0.71	Rarely Utilized
5	Fax machine	1.00	0.66	Not Utilized
6	Scanners	1.48	0.62	Not Utilized
7	Slide projectors	1.42	0.59	Not Utilized
8	Colour television	3.36	0.88	Moderately Utilized
9	Video machine	1.26	0.43	Not Utilized
10	Video CD/DVD	2.18	0.79	Rarely Utilized
11	Digital camera	1.17	0.90	Not Utilized
12	Computer printers	3.34	0.64	Moderately Utilized
13	Compact Disc	3.48	0.56	Moderately Utilized
14	Microfilm	1.30	0.37	Not Utilized
15	Overhead projector	2.31	0.82	Rarely Utilized
	Grand Mean	2.08	0.70	Rarely Utilized

Data in Table 2 show that out of the 15 items on ICT resources listed, business educators moderately utilize four items (items 3, 8, 12 and 13) with mean ratings ranging from 2.95 to 3.48. Five items (items 1, 2, 4, 10 and 15) with mean ratings ranging from 1.65 to 2.23 are rarely utilized by business educators and six items (item 5, 6, 7, 9, 11 and 14) with mean ratings ranging from 1.00 to 1.48 are not utilized by business educators. The cluster means score of 2.08 means that business educators' rarely utilized ICT resources in business teacher education programmes in colleges of education in Delta State. The standard deviations for all the items fall within the same range of 0.43 to 0.95. This shows that the respondents are not wide apart in their mean ratings.

Table 3: The t-test comparison of the mean ratings of business educators on the extent of utilization of ICT resources in Federal and State colleges of education (Federal =55; State = 53), df = 106.

S/N	Items Statement	X ₁	SD ₁	X ₂	SD ₂	t-cal	Sig.	Remarks
1	Electronic typewriters	1.58	.32	2.29	.46	1.24	.22	NS
2	Photocopiers	1.63	.50	1.97	.71	-.89	.38	NS
3	Computers	3.02	.27	3.36	.54	2.13	.01	S
4	Telephone	2.53	.34	3.01	.68	1.17	.25	NS
5	Fax machine	1.24	.68	1.15	.44	1.46	.15	NS
6	Scanners	0.98	.16	1.14	.32	-1.51	.42	NS
7	Slide projectors	1.09	.59	1.22	.29	1.26	.27	NS
8	Colour television	3.25	.43	3.41	.57	.71	.49	NS
9	Video machine	0.76	.30	0.97	.18	.98	.54	NS
10	Video CD/DVD	1.64	.51	2.43	.73	1.41	.17	NS
11	Digital camera	1.01	.45	1.88	.69	2.71	.00	S
12	Computer printer	3.16	.21	3.29	.49	4.03	.02	S
13	Compact disc	2.79	.66	2.43	.50	1.41	.31	NS
14	Microfilm	1.56	.14	2.09	.25	.62	.19	NS
15	Overhead projectors	1.21	.32	1.75	.68	1.12	.08	NS

Key: X₁= Mean of business educators in Federal colleges of education; X₂ = Mean of business educators in State colleges of education; SD₁= Standard Deviation of business educators in Federal colleges of education; SD₂= Standard Deviation of business educators in State colleges of education; Sig. = probability value (2 tailed); t-cal= calculated values; S= significant; NS= Not Significant.

Table 3 presents the summary of mean ratings of business educators on the extent of utilization of ICT resources in colleges of education in Delta State based on their institutional ownership. The Table reveals that three items with p-values ranging of .00, .00 and .02 are less than the significant value of 0.05 at 106 degree of freedom. This indicates that there is a significant difference in the mean ratings of business educators on the extent of utilization of some ICT resources in colleges of education in Delta State. Therefore, the hypothesis of no significant difference in the mean ratings of business educators with regard to items 3, 11 and 12 was rejected. On the other hand, hypothesis of no significant difference for items 1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 14 and 15 was accepted since the Significant values of these items, ranging from .08 to .54 are greater than 0.05.

Therefore, the null hypothesis of no significant difference in the mean ratings of business educators based on their extent of utilization of some ICT resources in colleges of education in Delta State was accepted. On the whole, business educators in federal and State colleges of education do not differ significantly in their mean ratings on the extent of utilization of ICT resources in business education programmes.

Table 4: The t-test comparison of the mean ratings of business educators on the extent of utilization of ICT resources based on their location N=108 (Urban =95; Rural = 13)

S/N	Items Statement	X_1	SD_1	X_2	SD_2	t-cal	Sig.	Remarks
1	Electronic typewriters	2.13	.34	2.29	.58	1.17	.15	NS
2	Photocopiers	2.44	.73	1.83	.49	1.48	.82	NS
3	Computers	3.29	.52	3.17	.21	.42	.68	NS
4	Telephone	2.38	.26	3.01	.54	-1.65	.34	NS
5	Fax machine	1.07	.73	1.24	.60	1.79	.20	NS
6	Scanners	1.34	.50	1.19	.36	.32	.55	NS
7	Slide projectors	0.93	.19	1.08	.28	1.46	.07	NS
8	Colour television	3.61	.48	2.94	.75	1.21	.12	NS
9	Video machine	1.11	.32	1.30	.14	.51	.19	NS
10	Video CD/DVD	2.65	.64	1.71	.31	-1.55	.88	NS
11	Digital camera	1.29	.21	1.18	.40	1.64	.47	NS
12	Computer printers	3.47	.57	3.69	.35	2.28	.01	S
13	Compact disc	2.88	.32	3.45	.57	-.89	.38	NS
14	Microfilm	1.62	.15	2.26	.26	2.68	.00	S
15	Overhead Projector	2.70	.87	3.09	.69	2.11	.01	S

Key: X_1 =Mean of business educators in urban areas; X_2 =Mean of business educators in rural areas; SD_1 =Standard Deviation of business educators in urban areas; SD_2 =Standard Deviation of business educators in rural areas; **Sig.** = probability value (2 tailed); **t-cal**= calculated values; **S**= significant; **NS**= Not Significant; **df** = 106.

Table 4 presents the summary of mean ratings of business educators on the extent of utilization of ICT resources in colleges of education in Delta State based on their location. The data reveal that three items with p-values ranging from .00, .01 and .01 are less than the significant value of 0.05 at 106 degree of freedom. This indicates that there is a significant difference in the mean ratings of business educators on their extent of utilization of some ICT resources in colleges of education in Delta State. Therefore, the hypothesis of no significant difference in the mean ratings of business educators regarding items 12, 14 and 15 is rejected.

On the other hand, hypothesis of no significant difference for items 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 13 is accepted since the Significant values of these items, ranging from .07 to .88 are greater than 0.05. Therefore, the null hypothesis of no significant difference in the mean ratings of business educators based on their extent of utilization of some ICT resources in colleges of education in Delta State is accepted. On the whole, business educators in colleges of education do not differ significantly in their mean ratings on the extent of utilization of ICT resources in business education programmes based on their location.

Discussion

The findings of the study showed that ICT resources are not available in business teacher education programme of colleges of education in Delta State. This finding is in line with Baba and Akarahu (2012) who held that facsimile, telex, projectors required for administration of business education programme in tertiary institution were not available for instructional delivery. The findings that ICT resources stipulated by the benchmark of NCCE for business education programmes were not available in colleges of education in Delta State was in agreement with the studies of Akuegwu, Ntukidem, Ntukidem and Jaja, (2011) and Ugbe (2018) who reported that ICT resources are not available in educational institutions in Nigeria.

In addition, the findings of the study revealed that business educators rarely utilized ICT resources in business teacher education programmes in colleges of education in Delta State. This finding is in accordance with the finding of Nweke (2013) who found that teachers did not use projectors, electronic media such as slide projectors and video conferencing during lectures. The under-utilization of these ICT resources may not be far from the non-availability of a number of ICT resources for training business education students as earlier revealed by the findings of the present study. The finding is in line with the studies of Onokpaunu (2013) and Nwaosa and Okolocha (2014) which reported that ICT learning resources are not utilized for instructions in business education programmes

The test of the first hypothesis indicated that business educators in colleges of education in Delta State did not differ significantly in their mean ratings on the extent of utilization of ICT resources based on institutional ownership. This finding is in agreement with Okeke and Ihenacho (2017) which reported that institution type has no effect on the extent to which business educators utilize internet facilities for teaching business education courses in various institutions. Furthermore, the non-significant difference in the mean ratings of business education on the extent of utilization of ICT resources as a result of location tallies with the study of Onokpaunu (2013) who reported that business educators' level of utilization of web-based resources for instructional delivery is very low. This finding is in consonance with Okolocha and Nwadiani (2015) which stated that

business educators' utilization of ICT resources for quality instructional delivery is significantly low irrespective of their location.

Conclusion

The introduction of ICT resources in the education system is aimed at improving educational delivery and preparing students for the numerous opportunities that come with the information age. The development of paperless offices and office automation procedures are responsible for the rapid integration of ICT resources in business education programmes in educational institutions. Based on the findings of the study, it was concluded that the inadequacy and low level of utilization of ICT resources by business educators will negatively affect the professional capacity of business education students to succeed and carve a niche of their own in the already digitalized business world.

Recommendations

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

1. Management of colleges of education should enter into partnership with ICT manufacturing organizations to assist in improving the supply of ICT resources in business education programme in order to enhance business education students' academic performance and boost the quality assurance indices of the programme.
2. Governments at the federal and state levels should prioritize the funding of education sector to meet up with the recommendations of UNESCO and ensure adequate procurement of ICT resources for effective educational activities in tertiary institutions in Delta State and Nigeria at large.
3. Management of colleges of education should ensure that relevant ICT resources are adequately provided for business education programme in colleges of education to facilitate effective utilization by business educators and students for quality teaching and learning. This is because no skill acquisition programme can be successful without the use of relevant equipment and resources

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