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NAU JOURNAL OF TECHNOLOGY AND VOCATIONALEDUCATION 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: Editorial Board, NAU Journal of Technology and Vocational Education Nnamdi Azikiwe University, P.M.B. 5025, Awka Anambra State, Nigeria.

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FROM THE EDITORIAL DESK

This edition of NAU Journal of Technology and Vocational Edutcation 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 peerreview 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.

Okeke, **A.U. PhD** Associate Professor 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 worl place of 21st century.

Prof. C. M. Ile HOD Vocational Education Department Nnamdi Azikiwe Univesity Awka

Dr. J. I. Obidile

STRATEGIES FOR IMPROVING TECHNICAL AND VOCATIONAL EDUCATION (TVE) PROGRAMME TO REDUCE UMEMPLOYMENT IN NIGERIA

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Abstract

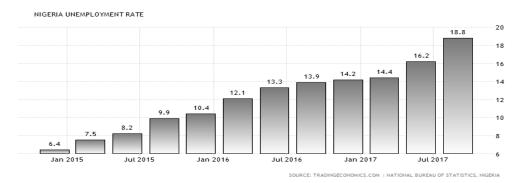
Technical and Vocational Education (TVE) is geared towards the development of specific skills for economic and social challenges. Considering the high rate of unemployment of TVE Nigerian graduates especially the secondary school leavers and the university graduates, it becomes pertinent to critically examine the role of TVE and proffer strategies for its improvement towards ameliorating the situation. This study therefore ascertains the state of TVE in Nigeria, emerging challenges in TVE and proposed strategies towards enhancing the TVE programme in Nigeria for economic development. The study would be of benefit to the researchers and curriculum planners as it would contribute to literature and enhance the knowledge of the curriculum planners on the strategies to include when planning the curriculum to improve TVE programme in order to reduce the rate of unemployment and poverty in Nigeria.

Keywords:Economic development, Employment generation, Poverty reduction, Technical and Vocational Education (TVE).

Introduction

Nigeria is blessed with both human and non-human resources yet; the country is still battling with so many challenges such as unemployment, poverty, group agitations, among others. It is believed that if these resources are effectively utilized, Nigeria could witness economic and social advancement. Economic advancement speeds up in a country when people are meaningfully engaged in one occupation or the other and thereby provide goods or services for human satisfaction. On the other hand, economic development of a country usually crumbles when there is high rate of unemployment. Information from the National Bureau of Statistics showed that unemployment in Nigeria raised from 9.9 per cent in the fourth quarter of 2015 to 18.8 per cent in the fourth quarter 2017 as shown in figure 1.

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Source: National Bureau of Statistics, Nigeria.

Figure 1: Diagrammatic representation of unemployment rate in Nigeria from 2015-2017.

Unemployment is a situation where people who are able and are willing to work could not find or create job. Without the development of human potentials in any society, it might be difficult to fully harness other resources in the quest for economic and social development. The need to effectively harness the resources and expose the citizens to functional skills of social value for economic gain brought about the introduction of Technical and Vocational Education (TVE) in education sector in Nigeria (Ekpenyong, 2011).

Technical and Vocational Education (TVE) is a form of education designed to equip the learners with necessary competencies for gainful employment. Jeerapattanatorn (2013) defined Technical and Vocational Education (TVE) as the education which aims to equip people with knowledge, skills and competencies required in particular occupations or more broadly in the labour market. According to Idris, and Mbudai (2016), Technical and Vocational Education (TVE) is described as the training given to individuals for the implementation of technological development of a nation. Based on the definitions above, it could be deduced that the important features of Technical and Vocational Education (TVE) include among others, its orientation towards the world of work and the acquisition of employable and entrepreneurial skills for gainful employment. This is to say that TVE form of education is expected to provide its recipients with the competencies needed to be productive and enterprising so as to enhance sustainable economic growth. Considering the high rate of unemployment which brought about increase in poverty level, one wonders whether TVE as practiced in Nigeria has been able to fulfill its objective of equipping its recipients with the necessary competencies for gainful employment. This study therefore ascertained the state of TVE in Nigeria, its challenges and proposed strategies which could enhance the achievement of TVE objectives in order to reduce the rate of unemployment and poverty in Nigeria. State of the Technical and Vocational Education (TVE) in Nigeria

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Historically, hands-on learning has been in practice in Nigeria (although in informal way) before the introduction of western education. Western education was brought to Nigeria with the advent of colonialism and their mission was to produce clerks, teachers and interpreters who could facilitate their trade (Iwuanyanwu, 2018). According to Fafunwa (1982), the first attempt to recognize technical education programme was its incorporation into the 1946 Ten Year Education Plan with the purpose of preparing students for entry-level jobs in occupations and to be productive members of the society. In 1982, the Nigerian education system witnessed the full implementation of the 6-3-3-4 system of education that emerged with variety of reforms (Ofoha, Uchegbu, Anyikwa & Nkemdirim, 2009). According to the authors, the reforms brought about the introduction of vocational subjects into the curriculum of secondary schools in Nigeria, this include the pre-vocational subjects to be offered at the junior secondary schools and the vocational subjects to be offered at the senior secondary schools. The main purpose of pre-vocational subjects at the junior secondary schools was to expose the students to various vocational areas for them to appreciate and develop interest to build future career in vocational and technical education specific areas. At the senior secondary level, TVE encompasses a wide range of areas of specialization which include but not limited to electrical engineering trade, applied electricity, electronics, mechanical engineering trade, auto mechanics, general metal work, civil engineering trade, building construction, wood work, home economics, business education, home management, food and nutrition, clothing and textiles.

Other trade subjects include: auto body repair and spray painting, auto parts merchandizing, welding and fabrication, electrical installation and maintenance work, Radio and TV servicing, electrical appliances repair, block/brick laying and concrete work, carpentry and joinery, furniture making, upholstery, garment making, textile trade, dyeing and bleaching, printing and photography trade, mining trade, transportation trade, beauty culture and cosmetology trade, tourism and hospitality trade, leather goods, manufacturing, keyboarding, shorthand, data processing, store keeping, book keeping and GSM maintenance (Federal Republic of Nigeria, 2009). The National Policy on Education emphasized that the TVE graduates from secondary school should be able to secure employment at the end of the whole course or after completing one or two modules of employable skills. Furthermore, that they should be able to set up their own businesses, become self-employed and employ others or pursue further education (technical) and universities.

At the tertiary level, Technical and Vocational Education (TVE) is an umbrella which covers so many units which include Agricultural Education Unit, Home Economics Unit, Business Education Unit which comprises Office Technology and Management (OTM) (formerly known as Secretarial Education), Accounting Education, Commerce and Cooperative Education, Computer Education and Distributive/Marketing Education. Another unit in TVE at the tertiary level is

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Industrial and Technology Unit which comprises Electrical, Mechanical, Building & Woodwork and Metal Work Education. Interested candidates who obtain up to the required scores are usually assigned into these units during admission.

Role of TVE in Nigeria

Technical and Vocational Education (TVE) was introduced into the education sector in Nigeria to produce craftsmen, master craftsmen and professionals (Federal Republic of Nigeria, 2009. Other objectives of TVE according to the policy include the following;

- 1. To provide courses of instruction and training in engineering, other technologies, applied science, business and management leading to the production of trained manpower.
- 2. To provide the technical knowledge and skills necessary for agricultural, industrial, commercial and economic development of Nigeria.
- 3. To give training and impart the necessary skills for the production of technicians, technologists and other skilled personnel who shall be enterprising and self reliant.
- 4. To train people who can apply scientific knowledge to solve environmental problems for the convenience of man.
- 5. To give exposure on professional studies in the technologies.

Considering the TVE areas and objectives outlined, it is expected that the TVE students from post basic level who could not further their studies should be able to get or create job using the competencies acquired and probably, further their education later in life to acquire more training and better pay if they desire. In the same vein, TVE students from tertiary level are expected upon graduation to be able to repair vehicles, build furniture, do house wiring, maintain roads, electricity and refineries, organize businesses more efficiently, improve the food supplies, proffer solution to technological, social and economic problems, among others. Unfortunately, the expected conditions seem not to be the reality. This could be as a result of several challenges confronting the TVE programme in Nigeria.

Challenges Facing the Technical and Vocational Education (TVE) Programme in Nigeria

Some of the challenges confronting the TVE in Nigeria as articulated by several scholars include but not limited to inadequate funding, inadequate teaching and learning facilities, laboratories and workshops (Okoye & Arimonu, 2016), inadequate motivation of TVE teachers (Onyene, Olusanya, Salisu & Johnson, 2007), fast disappearance of culture of hard work on the part of the TVE students and gap between theory and practice (Obidile, 2014). Other challenges include: low social status of TVE (Joshua, 2015), ineffective implementation of the TVE curriculum

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(Obusor, 2005), insufficient time for TVE practical (Inyiagu, 2014), inadequate TVE teachers' preparatory training programmes, ineffective monitoring of the TVE programme, the quest for immediate wealth by the TVE students (get wealthy quick syndrome), inadequate TVE programme linkages for transferability of ideas, inadequate TVE centres for teaching and learning of the appropriate skills and insufficient market for TVE products.

The issue of developing and sustaining skilled workforce for Nigeria industrial sector through the TVE programme is of paramount importance. Nigerian citizens especially the labour force population needs to be skilled through the TVE programme for either paid job or self employment so as to reduce the high rate of unemployment and poverty in the country. Although recently, the Nigerian government approved the establishment of Vocational Enterprise Institutions and Innovative Enterprise Institutions so as to admit secondary school graduates with minimum certificate and provide them with vocational and technological skills needed in various sectors of the economy (National Board for Technical Education NBTE, 2004). However, the impact of these enterprises has not been significantly observed, probably, because the target was on those with academic qualification(s).

Strategies for Adaptation

In order to enhance the TVE programme so as to enrich the capabilities of its recipients to satisfy industrial and social needs and reduce the rate of unemployment and poverty in Nigeria, the following strategies are proposed.

Incorporation of related skill acquisition programmes into the TVE programme: All the skill acquisition programmes like entrepreneurship programme, innovative enterprise institutions, among others should be registered under the TVE programme for proper monitoring, evaluation and reporting on a continuous basis. Any education and training provided by the government to equip its citizens with skills and attitude necessary to be productive and self reliant should be registered under the TVE programme for proper accountability and to prevent costly duplication of efforts. This would also ensure that government at all levels do not waste resources through the establishment of incompatible skill acquisition programmes that could not enhance development. When incorporating the related skill acquisition programmes into the TVE, there is need to categorize the TVE programme into different levels/sectors such as the formal sector and the non-formal sector. The formal sector which is already being practiced includes the TVE obtained within the school environment, while the non-formal sector should include the TVE training which are obtained outside the school environment.

The technical and vocational training outside the school setting (non-formal sector) should also be grouped into different levels considering the needs of the people, the industries, the environment and how tough the mastery of each skill appears. At each level, the duration could differ depending upon the individual

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capabilities. Upon completion of each level, the trainee should have mastered the specific skill but if otherwise, he would be given further training. When the trainee has met the required criteria and has shown proficiency in the skill acquired, upon graduation, he should be given a certificate which should be recognized by the public. The non-formal sector should be for both those with and without much education or certificate(s).

Increase access to TVE programme: Since TVE is designed to prepare skilled personnel at lower, middle and higher levels of qualification for one or group of occupation(s). Numerous well equipped TVE centres and institutes should be established in various communities across the nation (by the government in partnership with the town unions) putting into consideration the differences in geographical areas. These TVE centres should be made to provide various types of skill acquisition training for the unemployed, under-employed or new entrants to the labour market. The TVE centres should also be responsible for the re-training of the already employed citizens according to the required skills at a reduced cost. The TVE institutes/centres should also be made accessible to the vulnerable groups, handicapped, displaced workers, retired and the incarcerated population to enhance their economic development opportunities.

Effective industry and TVE programme collaboration/linkages: The success of the TVE programme depends on the effective co-operation and collaboration of the industry and the market demands. To achieve a sustainable TVE programme intervention, attention should be paid to strengthening the gap between the TVE and the labour market demands. TVE administrators should often conduct needs assessment of the people, the industries and the market and match them with proper TVE planning and implementation. Oviawe, Uwameiye and Uddin (2017) stated that for TVE in Nigeria to achieve its envisaged objectives, it must be properly strengthened through school-workplace training collaboration. It is worthy to note that if the TVE training given to citizens do not commensurate with the skills required in the industries and market, there would be incompatibility which could lead to increase in the rate of unemployment and underemployment. It is therefore imperative that TVE administrators should often ascertain the needs and demands of the local environment, the market and the industries with a view to structuring the TVE curriculum to meet these needs so that TVE graduates could fit in appropriately in the world of work.

Enhancement of TVE teacher preparatory and re-training programmes: Just as the saying goes 'one cannot give what one does not have'. Training and re-training of the TVE teachers are of paramount importance. TVE teachers should always receive adequate training and re-training for professional development. For TVE teachers to

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be up-to-date, they should always move with the positive changes which are usually observed in the teaching and learning processes. It is expected that teachers should take the lead in the positive changes that usually occur in education sector. Recently, the information and communication technology (ICT) facilities were introduced in the teaching and learning processes, it is expected that these facilities should be introduced and adequately used in the training and re-training programmes of the teachers. Changes in these new technologies should always be acknowledged and improved technology should be used in the training and re-retraining programmes of TVE teachers so as to enhance their skills to tackle the ever rising changes and demands of skills by the industries and labour market. As technological development is becoming rampant, it is important that TVE teachers so as to produce competent graduates who could compete favourably in this era of technological changes and challenges.

Adequate funding: Technical and Vocational Education (TVE) programme should be adequately funded in order to achieve its objectives especially as the programme is directly relevant to the world of work which serves as a bedrock for rapid development. Obulor (2006); Offiong, Akpan and Usoro (2013); Okwelle and Wordu (2016) observed that funding is one of the major challenges confronting TVE in achieving its objectives. For the TVE programme to live up to expectation, the practice requires adequate funding for infrastructure maintenance, technological facilities' repair and renewal and regular purchasing of improved equipment and tools that meet the industrial and environmental needs and demands. This entails that sufficient funds should be provided to the TVE programme by the TVE stakeholders in partnership with the government, for effective running of the TVE programme. Furthermore, adequate funding is also needed in the TVE programme to assist the TVE graduates who have demonstrated reasonable innovative skills to become employers of labour.

Provision of adequate equipment, laboratories and workshops: The same tools and equipment used in the industries should be used in the TVE programme. Using appropriate tools and equipment could make the recipients innovative as they look for ways of improving the already existing equipment. Most TVE teachers have been compelled to use the obsolete tools and equipment available to teach because of the non-availability of the improved tools and equipment and this could lead to the production of graduates who could neither get job in the industries nor create jobs probably due to lack of appropriate skills required to operate modern industrial equipment.

Similarly, Oviawe and Uwameiye (2010) reported that most TVE institutions lack the tools and equipment necessary for practical TVE education. According to the authors, the little equipment in workshops and laboratories are often obsolete, bearing

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little or no resemblance to the technologies currently used by the 21st century workplace. For improved teaching and learning of TVE, adequate equipment, laboratories and workshops should be provided and utilized in the TVE programme.

Provision of adequate career guidance: Technical and Vocational Education (TVE) students and trainees should be encouraged to achieve their career goals. They need appropriate career guidance and counseling services that would enable them concentrate on the programme. As Ojo (2008) opined that lack of comprehensive career guidance of students is one of the problems confronting the TVE programme. In order to tackle the TVE status disregard, it is believed that if the TVE graduates are adequately engaged after graduation, the programme could speak for itself and could be highly regarded by the public. When the public is certain about the employment benefits of the TVE to its recipients, there could be increase in the rate of enrollment of the citizens in the programme especially in the non-formal sector. Those who are not absorbed in the formal sector, could be absorbed in the non-formal sector and this could help to reduce waste of time and energy of the labour force who might be waiting endlessly for the university admission.

Incorporation of school-to-work programmes in the post basic education and extension of period of industrial training for TVE students in the tertiary institutions: The practice in Nigeria is that TVE students at the tertiary level are usually given few months ranging from three to six months for industrial training. At the post basic (secondary) level, most students are not given such opportunity. Incorporating school-to-work programmes in all the post basic education is necessary as it would help the secondary school students to practice what they have learnt and improve on them. As the saying goes 'practice makes perfect'. Furthermore, it would be necessary to attach a stipend which could be derived from Education Trust Fund and paid to those TVE students involved in the school-to-work programmes so as to motivate them. The little cash reward could also help those who might not have the opportunity to further their education due to financial constraint, to save and enroll in part-time studies. When this is done, it would go a long way to curb unemployed school drop outs. The school-to-work programmes to be incorporated at the post basic level could be in the form of job placement, mentoring, internship or apprenticeship.

Considering the market demand for appropriate skills, it is important to increase the period for industrial training of TVE students at the tertiary level from six months to two or more years of apprenticeship (Obidile, 2014). A good number of years of apprenticeship in industrial work experience scheme of the TVE students is important as it would enhance the competencies acquired and enable the recipients to visualize and interact with the environment and the labour market and also enhance the preparedness of TVE students for life of work.

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Provision of market for TVE products: Effort should be made by the TVE administrators to provide market for TVE products because, without adequate market for TVE products, there might not be economic independence which is the cornerstone of most human endavour. TVE administrators and TVE graduates should therefore create appropriate channels for marketing of TVE products which could be in the form of exhibition, trade fair or e-marketing/shops. Marketing of TVE products should also include adequate display of TVE research findings and results so that appropriate authorities could hold on to them and improve. Also, on-line TVE programme could be launched and marketed so that interested citizens who opt for that type of training could acquire them.

Conclusion

Technical and Vocational Education (TVE) programme which equip the recipients with the necessary competencies with which to be economically independent should be adequately recognized and implemented using the mapped out strategies, since the TVE programme is geared towards retrieving Nigeria from high rate of poverty, unemployment and technological dependence.

REFERENCES

- Ekpenyong, L. E. (2011). Foundations of Technical and Vocational Education: Evolution and Practice. Benin city: Ambik press.
- Fafunwa, B. (1982). The History of Education. Ibadan: Macmillan Publishers.
- Federal Republic of Nigeria FRN, (2009).National Policy on Education. Lagos: NERDC.
- Idris, A. & Mbudai, Y. (2016). Technical and vocational education: Challenges towards youths empowerment in Kano State, Nigeria. *Journal of Technical Education and Training (JTET)*, 9(1), 1-12.
- Inyiagu, E. E. (2014). Challenges facing technical and vocational education in Nigeria. *Journal of Educational Policy and Entrepreneurial Research* (*JEPER*), 1(1), 40-45.
- Iwuanyanwu, E. C. (2018). Restructuring higher education in Nigeria. A paper presented at the Faculty of Education public lecture, Awka, Nigeria, June 12-14.
- Jeerapattanatorn, P. (2013). Current issues on vocational and technical education in Nigeria. *Journal of Educational and Social Research*, 3(10), 121-125.
- Joshua, J. A. (2015). Challenges and prospects of vocational and technical education: Most important tool for enhancement and innovations in higher education in Nigeria. Journal of Research Development, 24(1), 1-8.
- National Board for Technical Education NBTE, (2004). *Guidelines and Procedures* for the Establishment of Private Technical and Technological Institutions in Nigeria. Kaduna: Programmes Department.

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Strategies for Improving Technical and Vocational Education ...

- Obidile, I. J. (2014). Vocational and Technical Education (VTE) in the 21st century: The way forward. *NAU Journal of Technology and Vocational Education*, 1(1), 1-6.
- Obulor, B. C. (2006). *The Problems of Fund Allocation in the Planning of Vocational Education in Nigeria.* Ibadan: University Press.
- Obusor, A. E. (2005). The implementation and constraints of technical and vocational education: Component of the National Policy on Education (NPE).
 A paper presented at the National Seminar on Vocational and Technical Education and Training, Kaduna, Nigeria, October, 15-17.
- Offiong, A. A., Akpan, A. G. & Usoro, S. H. (2013).Funding of vocational technical education in Nigeria in times of global economic recession.*International Journal of Arts and Humanities*, 2(2), 149-158.
- Ofoha, D., Uchegbu, C. N., Anyikwa, B. & Nkemdirim, M. (2009). A critical appraisal of the mode of implementation of Nigerian secondary school curriculum: Towards socio-economic empowerment of the youths.*Education Research Network for West and Central Africa*, pp.16.
- Ojo, A. (2008). *Elements of Guidance in Vocational Education*. Lagos: Peoples Educational Publishers.
- Okoye, R. & Arimonu, M. O. (2016). Technical and vocational education in Nigeria: Issues, challenges and a way forward. *Journal of Education and Practice*, 7(3), 113-118.
- Okwelle, P. C. & Wordu, C. C. (2016). Attitudes of private sectors towards funding of Technical Vocational Education and Training (TVET) programmes in Rivers State. *African Journal of Vocational Education*, 5(1), 82-87.
- Onyene, V., Olusanya, O., Salisu, R. & Johnson, O. (2007). Indigenous orientation in technical and vocational education (TVE) programme: Tool for sustainable society. *Educational Research Network for West Africa Central Africa*, pp. 46.
- Oviawe, J. I. & Uwameiye, R. (2010). Availability of human and material resources for teaching blocklaying and concrete works in technical colleges in Edo State. *Ebonyi Technology and Vocational Education Journal*, 1(1), 37-47.
- Oviawe, J. I., Uwameiye, R. & Uddin, P. S. O. (2017).Bridging skill gap to meet technical vocational education and training school-workplace collaboration in the 21st century.*International Journal of Vocational Education and Training Research*,3(1), 7-14.

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EXTENT OF INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS POSSESSED BY OFFICE TECHNOLOGY ANDMANAGEMENT GRADUATE WORKERS IN THE CIVIL SERVICE OF ENUGU STATE

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Abstract

The study determines the extent information and communication technology (ICT) skills possessed by office technology and management graduateworkers in the civil service of Enugu State. Two research questions guided the study and four null hypotheses were tested. Descriptive survey design was adopted for the study. The population was 200 Office Technology and Management (OTM) graduate workers from 27 ministries in Enugu State. No sampling was taken since the population size was manageable. A five point rating scale questionnaire containing 22 items in two clusters was used for data collection. The instrument was validated by three expertone in measurement and evaluation and two inbusiness education from the Faculty of Education, Nnamdi Azikiwe University, Awka. The reliability of the instrument was ascertained using test-retest which yielded co-efficient values of 0.61 and 0.90 for clusters B1 and B2with an overall reliability co-efficient value of 0.76. Mean and standard deviation were used to answer the research questions and determine the homogeneity of the respondents while t-test was used to test the null hypothesesat 0.05 level of significance. The findings revealed that the subjects lowly possessed internet service skills and moderately possessed file management skills. There was a significant difference in the mean ratings of male and female respondents on possessed internet service skill but no significant difference on possessed file management skills. Based on the findings, the researcher concluded thatOTM graduate workers cannot perform effectively adequately without possessing relevant ICT skills. It was recommended among others that government ministries should procure the latest model of ICT facilities to increase their usage by workers for enhanced efficiency, effectiveness and productivity.

Keywords: Information and communication technology (ict) skills, office technology and management graduates, civil service.

Introduction

The unprecedented technological advancement witnessed across the world has radically changed the old ways of doing things. Revolution in Information and Communication Technology (ICT) is by far the most widely felt of the advancements,

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hence, the general consensus that the world is in ICT age (information age or jet age). According to Nwabueze (2011) ICT is an umbrella term that includes any communication device or application, encompassing radio, television, cellular phones, computer and network hardware and software, satellite systems as well as various services and applications associated with them such as video conferencing and distance learning. ICT is often spoken of in a particular context such as ICT in education, health care, libraries, civil service among others.

The impact of new technologies is felt by organizations in every aspect. Computing technology, communication technology and mass storage technology are some of the areas of continuous development that have reshaped the way government offices and organizations access, retrieve, store, manipulate and disseminate information to users. The prevalence and rapid development ofICT has transformed human society from the information technology age to the knowledge age (Yusuf & Onasanya, 2013). In this regard, ICT is viewed as innovations that enable graduate workers in the civil service to perform their office tasks effectively and efficiently.

Office Technology and Management workers in the civil service are one of the staff responsible for public administration of the government of the country. It excludes the legislative, judicial and military branches (Ogidefa, 2008). Members of the civil service have no official political allegiance and are not generally affected by changes in government. The Nigeria civil service consists of workers in government agencies other than military. Most employee/career civil servants in the Nigerian ministries are progressing based on qualification and seniority. According to Olugbenga (2015), civil service is either a branch of governmental service in which individuals are employed or hired on the basis of professional merit as proven by competitive examination or the body of workers in any government agency apart from the military which is a separate extension of the national government.

Office technology and management graduate workers represent a holistic nomenclature ascribed to secretaries who perform office managerial services with modern automated machine such as computer, fax machine, addressing machine, scanning machine, printing machine, laptops, android phone among others. OTM graduate workers cannot perform effectively without adequate possession of relevant ICT skills and provision of the resources in government establishments. This is because the speed at which technology is evolving and changing methodology of office work is now on the increase andOTM graduate workers in Enugu State civil service are challenged the more.As a result of this, they are expected to assume greater responsibilities using the new technologies.The existing occupations and rising job requirements make retraining very necessary for all categories of workers including OTM graduate workers in diverse organizations. Therefore, only re-trained workers can fill the gap in manipulating the modern technologies for effective performance. The ability of OTM workers in civil service to effectively carry out their office tasks using ICTs depends on the level they possess ICT skills.

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Skill is a person's ability to perform a given task well as a result of training and practice. Obi (2015) defined skills as manual dexterity acquired through repetitive performance of operations. Skills are concerned with what people do (their work), how they do it (method and technology used) and what they achieve (their results). According to Idowu and Ogunbodede (2008),ICT skills involve using computer based technologies to manipulate, create, store and retrieve information, express ideas and communicate with others. ICT skills in the context of this study refer to the ability of OTM graduate workers to effectively manipulate and deliver office tasks using ICT gadgets. ICT skills expected of OTM graduate workers include internet service and file management among others which were not included in the old curriculum of business education.

The internet is the most and fastest growing part of the age of ICT. Internet is the abbreviated form of international communication (computer) network. The inception of the internet actually began over 25 years ago as a United States defense departmental project. The interneta global computer network that allows millions of computers around the world to communicate through the telephone system and communication lines. It is also referred to as web and digital information superhighway (Roderick, 2013). The impact of the internet is felt everywhere in the society and it has become an everyday household term. It is composed of many interconnected computers, enabling them to share information and processing power. The Internet has made it possible for people all over the world to communicate with one another effectively, inexpensively and to have free access to useful data for further processing. The internet is one of the computer and multi-media skills that have brought revolution to the entire educational system in recent times. It is another important skill area that is required by OTM graduate.

File management describes the fundamental methods for managing, storing and handling files (Bartlett, 2015). By using appropriate file and folder naming strategies along with good metadata practice and catalog soft, the person can make the most of the image collection. The data used in computer operation are kept in a hierarchical file system in which directions have files and subdirectories beneath them. Although one's use the computer operating system to keep our image data organized, how one's name files and folders, how one's arrange these folders are the fundamental aspects of file management. Johnson (2009), defined file management as organizing and keeping track of files and folders, helping the individual to stay organized so that information is easily located. A folder is a container for storing programs and files. It is similar to a folder in a file cabinet. As with a file cabinet, working with poorly managed files is like looking for a needle in a haystack. It is frustrating and time-consuming to search through irrelevant, misnamed and out-ofdate files to locate the one needed. Effctivefile management involves a number of tasks including creating folders, renaming folders and files, storing, sorting and handling computer files (Pacchiano, 2011).

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The work of Nigerian civil servants involves high level of documentation and information processing, storage, and retrieval. The information intensiveness of a civil servant's responsibility is that tools and technologies would be used to speed up the documentation, management and information handling are not only important but professionally necessary. The value of accuracy, correctness, completeness, relevance and timelessness in the area of documentation, data processing, communication, storage and retrieval system by the aid of ICT gadgets almost effortlessly and with jet speed has made ICT very important for workers in civil the service. As a result of the numerous benefits of ICT, the Federal Republic of Nigeria (FRN, 2013) imbibed ICT skills into the workforce, by currently organizing in-service courses for workers in the Nigerian civil service to update their ICT skills. Among these workers are male and female OTM graduates who are working in government offices. The training is being carried out in partnership with a computer institute called Digital Bridge Institute at the Federal Capital Territory, Abuja. The Federal Government has decided that the training will be a regular and continuous one (Digital Bridge Institute, 2015).

The influencing factors on information and communication technology are gender and age of the workers. Gender in this study refers to male and female civil service personnel. There is uneven embracement of ICT culture across the gender and generational divide which may be attributed to certain factors including attitudes of civil service personnel. Martina and Marjolein (2014) stated that in most western countries, the participation of females in ICT professional careers is not only low but is also still falling. Femalesseems to be shying away from ICT viewing it is boring and irrelevant. Similarly, age may also be a determinant factor in the use of ICT. Probably the older generations do not welcome technology as much as the younger generation. This may compel older generation to resist the use of technology. Katrin (2010) noted that it is often argued that the skills of older workers are outdated, making them more exposed to technology shocks than younger workers; or that older workers have lower learning capabilities. Underlying this process is the fact that ICT accelerates skill obsolescence. Given that older workers have completed their education less recently than younger ones, they are more affected by the lack of ICT competence.

Consequently, continuous training becomes a key policy instrument to foster the employability and retention of older workers. It is most likely that these issues may result in low effectiveness and efficiency of the OTM workers which may affect their performance on the job. Based on this background, it becomes pertinent to assess the ICT skills of OTM graduate workers in Enugu State Civil Service.

Statement of the Problem

Developments and transformations in office technology are increasing on daily basis and making office automation more complex, with negative impact on the performance of office workers including office technology and management (OTM)

graduates. Tunji (2014) observed that the central problem of Nigeria's civil service is its inability to respond to serious changes. Many of the OTM graduate workers and office technologists in the civil service of today still find it difficult to effectively operate ICT facilities (Ogidefa, in Akintode, 2013). Since the key feature of modern technology is the ability to handle information and data, it becomes a huge problem that must be resolved if OTM graduate workers are to fully optimize the use of ICT. Some challenges of the include but not limited miscommunication/misrepresentation of data due to preventable typographical errors, under-utilization of ICT facilities and platforms resulting to serious productivity loss, unnecessary loss of stored data/files, compromise of classified database due to poorly managed security firewall which can have damaging consequences on government business, poor transmission of information required for smooth running of government to the grassroots.

In all these, the societies are at the receiving end, suffering the consequences. It is therefore these problems that prompted the researcher to assess the ICT skills possessed by OTM graduate workers in Enugu State civil service with the view to identifying areas that need improvement for objective remedial actions.

Purpose of the Study

The main purpose of this study was to determine the extent of information and communication technology (ICT) skills possessed by office technology and management (OTM) graduate workers in Enugu State civil service. Specifically, this study determined the extent of:

- 1. internet service skills possessed by OTM graduate workers in Enugu State civil service.
- 2. file management skills possessed by OTM graduate workers in Enugu State civil service.

Research Questions

The following research questionsguided the study: To what extent do:

- 1. Office technology and management graduate workers in Enugu State civil service possess internet service skills?
- 2. Office technology and management graduate workers in Enugu State civil service possess file management skills?

Hypotheses

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

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- 1. There is no significant difference in the mean ratings of male and female OTM graduate workers in Enugu State civil service on the extent they possess internet service skills.
- 2. There is no significant difference in the mean ratings of OTM graduate workers in Enugu State civil service on the extent they possess internet service skills based on age.
- 3. There is no significant difference in the mean ratings of male and female OTM graduate workers in Enugu State civil service on the extent they possess file management skills.
- 4. There is no significant difference in the mean ratings of OTM graduate workers in Enugu State civil service on the extent they possess file management skills based on age.

Method

Descriptive survey research design was adopted for the study. The population for the study was 200 Office Technology and Management (OTM) graduate workers from the 27 ministries in the State. The entire population was studied without sampling because the size was manageable. A 22-item structured questionnaire validated by three experts one in educational measurement and evaluation from the Department of Educational Foundation and two in business education from the Department of Technology and Vocational Education, Faculty of Education, Nnamdi Azikiwe University, Awka was used for data collection. The internal consistency of the instrument was established using test-retest method which yielded reliability coefficient values of 0.61 and 0.90 for the two clusters respectively with an overall coefficient value of 0.76.

Descriptive statistics of mean and standard deviation were used to answer questions and determine homogeneity of the respondents. Decision on the questionnaire items and research questions was interpreted relative to the item and cluster mean based on the real limit of numbers on a five-point scale as follows: Very highly possessed (VHP), Highly possessed (HP), Moderately possessed (MP), Lowly possessed (LP) and Very lowly possessed (VLP). The t-test was used to test the null hypotheses at 0.05 level of significance. Where the calculated t-value was less than the critical t-value, it meant that there was no significant difference and the hypothesis was not rejected. Conversely, where the calculated t-value was equal to or greater than the critical t-value, it meant that there was significant difference and the hypothesis was rejected.

Table 1:Respondents mean ratings of	the extent	OTM gradua	te workers possess internet
service skills.		N = 194	
S/NInternet Service Skills	π	SD	Remarks
Possessed by OTM workers			
1. Search and browse via the			
internet	2.00	0.63	Lowly Possessed
Operatesearch engines	1.90	0.54	Lowly Possessed
3. Have tutorial online	2.00	0.45	Lowly Possessed
4. Print from web pages	2.20	0.60	Lowly Possessed
5. Cut and paste texts	2.70	0.64	Moderately Possessed
6. Save images from web pages	2.40	0.66	Lowly Possessed
7. Chart online with people	2.10	0.54	Lowly Possessed
8. Communicate and work together with other workers	2.20	0.60	Lowly Possessed
9.Send and receive mails	2.50	0.50	Moderately Possessed
10.Download relevant materials from internet	2.30	0.46	Lowly Possessed
11. Create web pages	2.20	0.60	Lowly Possessed
Cluster Mean	2.23		Lowly Possessed

Results

Table 1 shows that item numbers 5 and 9have mean scores of 2.50 and 2.70 respectively. This shows that OTM graduate workers moderately possess the listed items on internet service skills. The rest of the items with mean scores ranging from 1.90 to 2.40 showing that OTM graduate workers lowly possess item numbers 1, 2, 3, 4, 6, 7, 8, 10 and 11. The standard deviations which fall between 0.45 to 0.66 shows homogeneity of responses. The cluster skills. The standard deviation which falls between 0.45 to 0.66 shows homogeneity of responses. The cluster skills. The standard deviation which falls between 0.45 to 0.66 shows homogeneity of responses. The cluster skills is evice lowly possess the listed items on internet service skills.

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Table 2: Respondents mean ratings of the extent OTM graduate workerspossess file management skillsN =194

S/N	File Management Skills	\overline{X}	SD	Remarks
_	Possessed by OTM workers			
1.	Manage data	3.00	0.63	Moderately Possessed
2.	Create folders	2.90	0.30	Moderately Possessed
3.	Make a query request	3.40	0.66	Moderately Possessed
4.	Store and handle files	3.20	0.75	Moderately Possessed
5.	Produce reports on one file at a time	2.90	0.70	Moderately Possessed
6.	Name files and folders	3.00	0.63	Moderately Possessed
7. 3	Select objects	3.40	0.49	Moderately Possessed
8.	Drag and drop folders	3.20	0.60	Moderately Possessed
9.	Make use of pop-up menus	3.50	0.81	Highly Possessed
10.	Rename files	3.20	0.60	Moderately Possessed
11.	Get online help on the object or file	2.80	0.60	Moderately Possessed
71 4	N. M.		2 1 4	M. L. A.L. D

Cluster Mean

3.14 Moderately Possessed

Table 2 shows that the respondents highly possess item numbers 9 on file management skills. The item numbers 1, 2, 3, 4, 5, 6, 7, 8, 10 and 11 are ratedmoderately possessed with respective meanscores of 2.80 to 3.40. This indicates that OTM graduate workers moderately possess file management skills. The standard deviationswhich fall between 0.30 to 0.81 shows homogeneityresponses. The cluster mean score of 3.14 shows that OTM graduate workers in Enugu State civil service moderately possess the listed items on file management skills.

Testing of Hypotheses

Table 3: t-test summary of difference between male andfemale respondentsmean ratings on the extent they possess internet service skillsN=194

Gender	Νπ	SD	αDf	t-cal p-va	lue Remarks
Male	1122.27	.19.21	0.05192	2 77 00	C:: C:t
Female	822.17			-3.77 00	Significant

Data in Table 3 show that there is a significant difference in the mean ratings of male and female OTM graduate workers in Enugu State civil service on the extent they possess internet service skills. This is shown by the t-cal value of -3.77 at 192 degree of freedom and the P-value of (.00) which is less than the 0.05 level of significance.

Therefore, there is a significant difference between the two groups and the hypothesis is rejected.

Table 4: Summary of t-test summary of difference between age of 18-40 and 41-60 respondents mean ratings on the extent they Possess internet service skillsN=94

Age	Ν	π	SD	αDf	t-cal	p-value	Remarks
18 – 40 years 41 years and above			.20.16	0.05 192		.00	Significant

Data in Table 4 show that OTM graduate workers in Enugu State civil service aged 18 to 40 years and those aged 41 years and abovediffer significantly in their mean ratings on the extent they possess database management skills. This is shown by the t-cal value of 0.97 at 192 degree of freedom and the P-value of (.00) which is less than the 0.05 level of significance. Therefore, there is a significant difference between the two groups and the hypothesis is rejected.

Table 5: Summary of t-test difference between male and female respondentsmean ratings on the extent they possess file management skillsN=194

Gender	N \overline{X}	SD	αDf	t-cal	p-value	Remarks
Male	1123.18	.24	0.05 192	-3.11	.02	Significant
Female	82 3.08	.20				

Data in Table 5 show that there is a significant difference in the mean ratings of male and female OTM graduate workers in Enugu State civil service on the extent they possess file management skills. This is shown by the t-cal value of -3.11 at 192 degree of freedom and the P-value of (.02) which is less than the 0.05 level of significance. Therefore, there is a significant difference between the two groups and the hypothesis is rejected.

Table 6: Summary of t-test difference between age of 18-40 and 41-60 respondents mean ratings on the extent they Possessfile management skills N=194

Age	Ν	π	SD	α	Df	t-cal	p-value	Remarks
18 –40 years	118	3.13	.21	0.05	192	2.67		
41years and above	76	3.15	.25				.50	NotSignificant

Data in Table 6 show that OTM graduate workers in Enugu State civil service aged 18 to 40 years and those aged 41 years and abovedo not differ significantly in their mean ratings on the extent they possess file management skills. This is shown by the t-cal value of 2.67 at 192 degree of freedom and the P-value of (.50) which is greater

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than the 0.05 level of significance. Therefore, there was no significant difference between the two groups and the hypothesis isnot rejected.

Discussion

Findings of the study revealed that OTM graduate workers in Enugu State civil service lowly possessed internet service skills. The outcome of this study agreed with the findings of Onojaife (2008) who stated that people live in the information age where knowledge is power. The internet therefore, helps users in three basic ways: to get information; to provide information; and to compile information. The ability to operate a computer system to perform job related tasks, use web browsers and searching on the internet to retrieve information and communicating with others by sending and retrieving e-mail is an essential part that is needed in everyday skills especially those in organizations.

The study also revealed that there was a significant difference among the ratings of male and female OTM graduate workers in Enugu State civil service on the extent they possessed internet service skills. It followed therefore that the null hypothesis was not accepted. In addition, OTM graduate workers in Enugu State civil service differed significantly in their mean ratings on the extent they possessed internet service skills based on age in the area of study. This finding is supported by Emeasoba (2015) who opined that male and female OTM lecturers possessed only operation competencies and networking, computer to a high extent telecommunication and media competencies to a low extent. In the area of age, Behaghel (2010) held that there is evidence in the literature that the demand for older workers has been negatively affected by the rapid development of Information and Communication Technologies (ICT).

It was also found out the study that OTM graduate workers in Enugu State civil service moderately possessed file management skills for managing data, creating folders, making a query request, storing and handling files, naming and selecting files and folders, renaming files, getting online help on thefile among others. They also highly possessed file management skills for making pop-up menus.

The findings agree with Pacchiano (2011) who opined that effective file management involves a number of tasks including creating folders, renaming folders and files among others. Being able to keep track of and find computer files when one's need them can make a big difference to ones' productivity stress levels. To help one save time and work more effectively, it is well worth putting a file management system in place to help one's business run more smoothly. In support of this, Nwaokwa and Okoli (2012) stated that ICT has influenced the performance of OTM workers in much different ways: speedy delivery of information, accuracy and effectiveness at work.

The study also revealed that there was no significant difference among the responses of male and female OTM graduate workers in Enugu State civil service on

the extent they possessed file management skills. In addition, OTM graduate workers in Enugu State civil service did not differ significantly in their mean ratings on the extent they possessed file management skills based on age in the area of study. Therefore, it followed that the null hypothesis was not rejected. This was supported by Olokoba, Abdullahi and Omosidi (2014) who opined that the ICT training(s) teachers received do not have desired impact on instructional usage.

Conclusion

Based on the findings, it can be concluded that OTM graduate workers cannot perform effectively without a good hands on ICT skills required especially the internet service skills which is required for effective performance in the office. It is concluded that the provision of ICT equipment is very paramount to enable OTM graduate workers acquire the necessary skills for effective job performance where everything is technologically driven both in the office and in the business world.

Recommendations

Based on the findings of this study, the researchers proffered the following recommendations:

- 1. Government ministries should procure the latest models of ICT facilities to enhance OTM functions in offices.Adequate provision of latest ICTs facilities will not only motivate the workers but will also increase their efficiency, effectiveness and productivity.
- 2. Mandatory training and re-training of office technology and management workers should be instituted by the government. This will help to equip OTM workers with the latest skills that will help them to perform effectively in the office using latest ICT equipment.
- 3. OTM workers in the civil services should be taught by skilled business educators. This could be possible by training more business educators with latest ICT facilities while in school.

REFERENCES

- Akintode, D. (2013). *The secretary in Nigeria*. Bizcovering. Retrievedfrom http://www.triond.com/users/ivor+Ogidefa: August (2014).
- Bartlett, B.(2015). What are M.S office skills? Retrieved from http://www.Demand Media. Com/what-are-MS-Office-Skills.
- Behaghel, L. & Greenan, N. (2010). Training and age-biased technical change: Evidence from French micro data. Contexts New York: McGraw-Hill Book Company.

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Extent of Information and Communication Technology Skills ...

- Digital Bridge Institute, (2015). Digital bridge institute graduates another batch of civil servant trainees. Retrieved fromhttp://fmi.gov.ng/digital-bridge-institute-dbi-graduates-another-batch-of-civil-servant-trainees/
- Emeasoba, G. (2015). Assessment of information and communication technology competencies possessed by office technology and management lecturers in tertiary institutions. Retrieved from http://lone-gogle.com/ecommerce-search.ntm.
- Idowu, B. & Ogunbodede, E. (2008). Information and communication technology in Nigeria: The health sector experience. *Journal of InformationTechnology Impact*, 3(2), 69-76.
- Johnson, S. (2009). *Managing files and folders in windows* 7. Pearson Education, Que Publishing.
- Katrin, S. (2010). Computer use and the employment status of older workers: An analysis based on individual data.New York: McGraw-Hill.
- Martina, R.M. & Marjolein, D. (2014). *Participation of females in ICT professional careers*. New York: McGraw-Hill.
- Nwabueze, A. U. (2011). Information and communication technology for sustainable development in Nigeria.Retrieved from http://www.faqs.org/periodicals.
- Nwaokwa, E. & Okoli, B. E. (2012). Information and communication technology on the influence performance of secretaries in government ministries in Nasarawa State, North-Central Nigeria. *Research Journal of Information Technology*,4(3), 93-97.
- Obi, C. A. (2015). *Methodology in business education* Enugu: Oktek Publishers Nigeria Ltd.
- Ogidefa, I. (2008). The secretary in Nigeria. Retrieved from http://www.triond.com/users/ivor+Ogidefa. October (2014).
- Olokoba, A. A., Abdullahi, A. M. & Omosidi, S. A. (2014).Impact of information communication technology on the management and performance of secondary school teachers in Kwara State, Nigeria. *International Journal of Education Learning and Development*, 2(3), 60-67.

- Olugbenga, P. F. (2015). *Civil service administration and effective service delivery for development*. Retrieved from http://www.headofserviceekiti state.gov.ng
- Onojaife, C. A. (2008). Effects of modern information and communication technology on secretarial workers, *Journal of Office Management and Technology*, 1(1), 51-58.
- Pacchiano, E. (2011). *Effective file management*.Retrieved from (https://www.reference.com/technology/definition-file-management).
- Roderick, H. (2013). Integrating the internet into business education program. Computer Science/Business Education teacher, Alton C. Crews middle school: GS Dept-Home.
- Tunji, O. (2014). *Public service reform and imperative of a professional civil service in Nigeria*. Retrieved from www.enugu state.gov.ng
- Yusuf, M. O. & Onasanya, S. A. (2013). Information and communication technology ICT and teaching in tertiary institutions. In teaching in tertiary institutions, Ogunsakin, E. A. (Ed.). Faculty of Education, university of Ilorin, Ilorin, Nigeria.

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ENGAGING IN CORPORATE SOCIAL RESPONSIBILITY PRACTICES BY COMMERCIAL BANKS IN CROSS RIVER STATE

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Abstract

The study determined how commercial banks in Cross River State are engaging in ethical marketing practices and community involvement practices all aspects of corporate social responsibility practices. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. Survey research design was adopted for the study. Population for the study comprised 578 community representatives in Cross River State. A sample size of 216 was drawn using multi-stage sampling technique. For effective investigation a 24 item structured, validated questionnaire was used for collection of data from the respondents. The reliability of the instrument was established using split half method and a reliability co-efficient of 0.82 was obtained. Data collected were analyzed using mean scores for the research questions. The hypotheses were tested using One-way analysis of variance. The findings of the study revealed among others that the commercial banks in Cross River State poorly engage in corporate social responsibility practices. It was recommended among others that commercial bank owners should organize in-house ethical training to help their employees make appropriate ethical decisions to meet the ethical concerns of their consumers and the host community.

Key Words: Corporate social responsibility practices, Commercial Banks, Cross River State

Introduction

Community members' attitude to what is right and wrong is constantly changing and this affects the ways organizations operate. Businesses presently have to balance their desire to maximize profit against the needs of the stakeholders. This aspect of businesses' practice is called corporate social responsibility. Corporate social responsibility is an individual's, group's or organization's moral obligation towards others who are affected by the group's/organization's dealings. According to University of Southern California (2014), corporate social responsibility (CSR) is a business philosophy that stresses the need for firms to behave as good corporate citizens. Albinsson, Perera and Sautter (2011) opined that the theory of corporate social responsibility is built on a system of ethics, in which decisions and actions

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should be ethically validated. If the actions or decisions cause harm to individuals, society or the environment then they would be considered to be socially irresponsible and unethical.

Onwuegbuchi (2009) averred that corporate social responsibility is the deliberate inclusion of public interest into corporate decision making and the honouring of the triple bottom line of people, planet and profit. In other words, CSR policy entails self-regulation, adherence to rules and regulations, ethical standards, environmental responsibility and sustainability. Accordingly, Mirvis, Delong, Googins, Quirin and Velsor (2010) asserted that there is a change in the popular attitude of organizations. Thus the traditional views that emphasize profit maximization and shareholder returns are being dropped in favour of contemporary attitude that emphasizes value creation, legal compliance, minimizing harms, upholding stakeholder needs, deeper social and environmental responsibilities. The broad categories of corporate social responsibility that organizations practise according to Nicole (2015), are environmental sustainability, community involvement, ethical marketing and ethical labour practices. This study focused on community involvement and ethical marketing practices. Yusuf (2012), stated that community involvement aspect of corporate social responsibility practices refers to what an organization does to positively influence the society where it operates. This could be in the form of volunteer assistance programmes, special scholarships; preserving of cultural heritage and beautification of cities Uadiale and Fagberni (2011) added that it could be in form of giving money or time. These could take the form of working with local community on school projects, sponsorship of local sports teams and working on community projects among others. Another aspect of CSR

practices that is the focus of this study is the ethical marketing practice, this is done by organizations that ethically market to consumers. Ethically based organizations or investments are concerned with how profit is made and how much profit is made, whereas traditional profit-centred free-market based business is essentially only concerned with how much profit it has made. According to Schneider (2010) traditional profit-centred business seeks to maximize profit and return on investment with no particular regard on how their profits are made and what the social effects of the business activities are. Gebler (2012) asserted that the ethical issues in finance that organizations, entrepreneurs and employees are confronted with spread across such areas as accounting, window dressing, misleading financial analysis, related party transactions not at arm's length, insider trading, securities fraud leading to manipulation of the financial markets, executive compensation, bribery, kickbacks, over billing of expenses, facilitation payments and fake reimbursements. Thus, the need for organizations to effectively engage in corporate social responsibility practices. Corporate social responsibility practices among organizations can be assessed across all cadres of

organization, this study focused on commercial banks only. Tammy (2018) defined commercial banks as depository institutions that are for-profit entities that provide a

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number of services to their account holders and allow customers to deposit money in an account. They operate at the local, regional or national levels, have large advertising budgets and charge higher fees. There are so many commercial banks in Cross River State among which are First Bank Nigeria PLC, Union Bank of Nigeria PLC, Zenith Bank of Nigeria PLC to mention a few. Cross River State has so many spokes men and women who are usually addressed as community leaders. There are also so many capable and influential youth leaders in the various Local Government Areas. The state also has several political ward councilors.Corporate social responsibility practices of organizations are expected to attract infrastructural facilities to the organization's host community/state of operation and lead to the development of many cities that immigrants would be attracted to live in. An overview of Cross River State shows that there is no access road to and fro and within the state. Majority of the people are poor and unemployed. Hub Team (2015) opined that the vast majority of the populations live in rural areas and stay in small-nucleated settlements along the motorable high ways. With so many commercial banks thriving in Cross River State (CRS) and with virtually no access roads to, fro and within the state, increased unemployment, anti-social vices, youth restiveness and area boys menace, one wonders how the commercial banks in CRS engage in corporate social responsibility practices. To this end, this study is conceived to find out how commercial banks operating in Cross River State engage in corporate social responsibility practices

Statement of the Problem

Many corporations though they pay tax use corporate social responsibility methodologies as strategic tactics to gain public support for their presence in the community. Corporate social responsibility improves the company's social respect and creates an environment of health, safety practices at the workplace and bring development to the society at large. The benefits of engaging in CSR practices are immense for corporations, the community and other stakeholders. With so many commercial banks thriving in Cross River State, it is expected that there will be beautiful cities in the state booming with business activities and infrastructure such that the populace will be attracted to work and live in them. However, an overview of Cross River State shows that apart from Calabar the ancient city no other city in the state has much to offer in terms of infrastructural development, business activities and employment opportunities. The declining environmental, social and ethical issues such as youth restiveness, anti-social vices which are presently on the increase are causes of concern to the researcher, who wonders how the commercial banks in Cross River State engage in corporate social responsibility practices.

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Purpose of the Study

The main purpose of the study was to ascertain how commercial banks in Cross River State engage in corporate social responsibility practices. Specifically, the study ascertained how:

1. Commercial banks in Cross River State engage in ethical marketing practices.

2. Commercial banks in Cross River State engage in community involvement practices

Research Questions

The following research questions guided the study.

- 1. How do commercial banks in Cross River State engage in ethical marketing practices?
- 2. How do commercial banks in Cross River State engage incommunity involvement practices?

Hypotheses

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

- 1. There is no significant difference in the mean ratings of community leaders, ward councilors and youth leaders on how commercial banks in Cross River State engage in ethical marketing practices.
- 2. There is no significant difference in the mean ratings of community leaders, ward councilors and youth leaders on howcommercial banks in Cross River State engage in community involvement practices.

Method

The research design adopted for this study is the survey research design. The study was conducted in the 18 local government areas in Cross River State. The population of the study consisted of 578 community representatives in the state. The community representatives were labeled as community leaders, ward councillors and youth leaders. There are 200 community leaders, 222 ward councillors, and 156 youth leaders in the area of study. (Sources: Local Government Service Commission in Calabar gave information on the community representatives).

The sample size for the study is 216 community representatives in the 18 Local Government Areas selected using the three stages multi- stage sampling technique. The first stage was using purposive sampling technique to determine the number of community representatives to be chosen from each Local Government Area. In this way four spokes men named community leaders, four ward councillors and four youth leaders were chosen from each Local Government Area. The second stage in the three stages multi-stage sampling technique was using the simple random sampling technique to choose the ward councilors. The method of balloting without replacement was used in this stage. The third stage was the use of snowball sampling technique to select the community leaders and the youth leaders. To get the required

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number of community leaders and youth leaders the ward councilors and other members of the community helped in identifying the youth leaders and spokesmen in the community who were used in this study as community leaders. The instruments for data collection was a questionnaire. The questionnaire was structured on a five point scale of Very Well Engaged (VWE) 5, 4.50 – 5.00, Well Engaged (WE) 4, 3.50 - 4.49, Poorly Engaged (PE) 3, 2.50 – 3.49, Very Poorly Engaged (VPE) 2, 1.50 – 2.49, and Not Engaged (NE) 1, 0.05 - 1.49. Three experts validated the instruments. Two experts were from the department of Vocational Education and one from Measurement and Evaluation all from the University of Calabar. The reliability of the instrument was established using split- half reliability method, which yielded a reliability coefficient of 0.82. Copies of the questionnaire was administered by the researcher with the help of three research assistants personally selected and briefed by the researcher. Two hundred copies of the questionnaire were properly completed by the respondents and used for data analyses. Data collected were analyzed using weighted mean, standard deviation and One Way Analysis of Variance (ANOVA). The decision rule: for the research questions any value equal to or more than 2.50 was considered as well engaged in. while scores below 2.50 were considered as poorly engaged in. For the standard deviation, any value up to 1.00 and above 1.00 was considered that the scores were widely scattered about the mean and vice versa for standard deviation value below 1.00. For the test of hypotheses, the decision was to reject the null hypotheses where the F- calculated value is greater than the Table value. If otherwise, do not reject. The researcher used the Statistical Package for the Social Sciences (SPSS) version 20 for the analyses.

Results

The presentation and analysis of data and results are presented in tables below: Table1

Respondents' Mean Ratings on how commercial banks in Cross River State engage in

Ethical Marketing Practices

S/N	Ethical marketing practices X Sd Remarks			
1.	Care for the customers' complaints 3.12 .5	9 PE	Ξ	
2.	Avoid manipulations and sales tactics that harm customers' trust.	3.07	.31	PE
3.	Provide true claims of advertisement for products and services	3.09	.46	PE
4.	Correct information about product characteristics enclosed in			
adve	rtisement3.12 .37 PE			
5	Truthful and forthright in dealings with customers and stakeholders	3.19	.47	PE
6.	Make strenuous efforts to serve the needs of the customers	3.55	.66	WE
7.	Avoid false, misleading, and deceptive promotions	3.30	.49	PE
8.	Accept constructive criticism from customers and other stakeholders	3.23	.48	PE
9.	Products are appropriate for their intended uses.	3.09	.57	PE
	28			

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10. Marketing communications about go	oods and services are not		
intentionally deceptive or misleading		3.60 .72	WE
Cluster Mean	3.23 .51 PE		

Data inTable 1 shows that of the ten items used for the cluster, eight items were rated as being poorly engaged in. Two items were rated as being well engaged in. The cluster mean value of 3.23 is also in the range of poorly engaged in. The implication is that the commercial banks in Cross River State poorly engage in ethical marketing practices. All the standard deviation values are not up to 1.00. This standard deviation values show that there is homogeneity in the respondents' ratings.

Table 2

Respondents' Mean Ratings on how the commercial banks in Cross River State engage in Community Involvement Practices

S/N Con	nmunity involvement practices XSd Remark
11. Contr	ibute generously to community projects 2.91 .76 PE
	de recreational facilities to the communities 2.93 .71 PE
13 Awar	d scholarship to qualified indigenes 2.47 .54 PE
14. Supp	ort the cross river state annual Christmas carnival 3.50 .82 PE
15. Increa	use sustainable access to safe drinking water 2.83 .69 PE
16. Supp	ort developmental initiative made by the community 2.50 .50 PE
17. Empl	by community members 3.45 .58 PE
18. The i	ncentive system encourages performance by members
of the com	nunity to work for the organization 2.86 .70 PE
19. Creat	e employment opportunities for members of the communities 3.05.71 PE
	roads in the community 1.25 .43 NE
21. Build	hospitals in the community 1.81 .72 VPE
	with local community on school projects 2.94 .85 PE
23. Perm	t students on industrial work experience scheme
	he organization 2.60 .52 PE
24. Build l	ostels, classrooms in the community 3.05 .87 PE
Cluster	Mean 2.73 .62 PE

Table 2 shows that 14 items were used for community involvement practices, of the fourteen items one item was rated as being very poorly engaged in while one item was rated as not being engaged in. Twelve items were rated as being poorly engaged in. With the cluster mean value of 2.73 which is in the range of poorly engaged in, the implication is that the commercial banks in Cross River State poorly engage in community involvement practices. All the standard deviation values are not up to 1.00. This standard deviation values show that the respondents' ratings are homogenous.

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Table 3

Summary of One Way Analysis of Variance (ANOVA) of Community Leaders, Youth Leaders and Ward Councillors on how the commercial banks in Cross River State engage in Ethical Marketing Practices.

Source	Sum of		Mean	F-cal	F-crit	Remark
of Variance	Square	df	Square			
Between Groups	1.351	2	.675	.192	3.04	
Within Groups	691.204	197	3.509			Not Significant
Total	692.555	199				

Table 3 shows One Way Analysis of Variance result of Community Leaders, Youth Leaders and Ward Councillors on Ethical Marketing Practices. The Fcalculated value of .192, is less than the critical value of 3.04 at 2 and 197 degrees of freedom and 0.05 level of significance. By this result the null hypothesis is not rejected.

Table 4

Summary of One Way Analysis of Variance (ANOVA) of Community Leaders, Youth Leaders and Ward Councillors on how the commercial banks in Cross River State engage in Community Involvement Practices

Source <u>of Variance</u>	Sum of Square	df	Mean Square	F-cal	F-crit	Remark
Between Groups	9.085	2	4.543	.576	3.04	
Within Groups	1554.790	197	7.892		No	ot Significant
Total	1563.875	199				

Table 4 shows One Way Analysis of Variance of Community Leaders, Youth Leaders and Ward Councillors on community involvement practices. F- calculated value is .576, which is less than the critical value of 3.04 at 2 and 197 degrees of freedom and 0.05 level of significance. Since the calculated F- value is less than the critical F- value the null hypothesis is not rejected.

Discussion

Findings of the study are discussed as follows;

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Ethical Marketing Practices by commercial banks in Cross River State

The first research question showed that the commercial banks in Cross River State poorly engage in ethical marking aspect of corporate social responsibility practices. The finding from this study clearly indicated that the corporate social responsibility practices by commercial banks in Cross River State do not meet the standard stated by Nicole (2015). Nicole pointed out that companies that ethically market to consumers are placing higher value on their customers and respecting them as people who are ends in themselves. They do not try to manipulate or falsely advertise to potential consumers. This poor engaging in ethical marketing practices by the commercial banks could account for the situation in Cross River State and Nigeria in general which is not different from what Badaiki (1998) posited.

Badaiki posited that unfair trade practices cut across every spectrum of the Nigerian economy and are manifested in different forms. Badaiki asserted that organizations practise this by adulteration of their products, artificial scarcity of the products, price hikes and non-availability of the products. Also that these are practices indulged in by various sections of the society causing the consuming public to be short -charged, cheated and deceived. The result of the first null hypothesis showed that there is no significance difference in the mean ratings of community leaders, youth leaders and ward councilors on how commercial banks in Cross River State engage in ethical marketing practices. This means that status of the respondents did not affect the ratings that the commercial banks in Cross River State poorly engage in ethical marketing aspect of corporate social responsibility practices. This finding collaborates that of Githui (2014) that companies have turned blind eyes on ethical marketing while advertising are only motivated by profits.

Community involvement practices by commercial banks in Cross River State

The finding of the study showed that the commercial banks in Cross River State poorly engage in community involvement aspect of corporate social responsibility practices. This finding supports the observation of Sharmin, Khan, and Belal (2014) in a critical assessment of a widely publicized Corporate Community Initiative of the Lifebuoy Friendship Hospital (LFH) in the Northern Bangladesh by Unilever Bangladesh Limited in collaboration with a local Non-Governmental Organization called Friendship. Sharmin, et al, posited that UBL and Friendship companies made lofty claims about the achievement of this project as a manifestation of their corporate social responsibility.

Sharmin, Khan, and Belal (2014) further examined the Corporate Community Initiative (CCI) of Lifebuoy Friendship Hospital with a view to assess the extent to which it meets the expectations of the community where it operates. They observed that although the initiative has clearly brought in vital healthcare services to some of the most vulnerable and desperately poor communities, the level of actual engagement of the local people - the main stakeholders has been marginal. Their corporate role in terms of practical efforts in the field has been mostly superficial and limited.

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The analysis indicated that there is no significant difference in the mean ratings of community leaders, ward councillors, and youth leaders on how the commercial banks in Cross River State engage in community involvement practices. This means that the respondents are of the opinion that the commercial banks are poorly engaging in community involvement practices. The implication is that the community representatives are unanimous in their opinion in rating commercial banks as not adequately engaging in community involvement practices in Cross River State. The finding of this study is at variance with the finding of Akporien (2015). Akporien carried out a study on Triple Bottom Line reporting practices in Nigerian quoted firms and found out that the companies are doing so much for the host communities.

The result from this study discredited the views expressed by Stites and Michael (2011) who posited that the focus on CSR is even more pronounced, and community involvement has increasingly been recognized as a high-priority area among businesses. The finding of this study is not consistent with the statement by Fontaine (2013), who stated that the Committee for Economic Development (CED) in its 1971 publication observed that business functions by public consent, and its basic purpose is to serve constructively the needs of society to the satisfaction of society. The CED further noted that business assumes a role in contributing to the quality of life and that this role is more than just providing goods and services. Noting that business, as an institution, exists to serve society, that the future of business will be a direct result of how effectively managements of businesses respond to the expectations of the public. A look at the organizations studied in this research show that they have promising future irrespective of their poorly engaging in corporate social responsibility practices.

Conclusion

Based on the findings from the study, it is concluded that the engagement in corporate social responsibility practices by commercial banks in Cross River State could be contributing to increased anti-social vices, youth restiveness, area boys' menace and unemployment in the state.

Recommendations

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

- 1. Owners of commercial banks should improve their engagement in corporate social responsibility practices to help bring development to the state.
- 2. Commercial banks owners should organize in-house ethical training to help employees make appropriate ethical decisions to meet the ethical concerns of their customers and their host community.
- 3. Owners of commercial banks should proactively promote public interest by engaging in corporate social responsibility to encourage community growth

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and development and voluntarily eliminating practices that harm the public sphere.

References

- Akporien, F. O. (2015). Triple Bottom Line reporting practices in Nigerian quoted firms. Unpublished Master Thesis, Department of Accountancy, Nnamdi Azikiwe University Awka.
- Albinsson, P. A., Perera, B. Y., & Sautter, P. (2011).Integrating sustainability into the business curriculum through e-learning.*MERLOT Journal of Online Learning* and Teaching, 7(1), 117.Retrieved July 12, 2014, from http://creativecommons.org/licenses/by-nc-sa/3.0/us/
- Badaiki, A. D. (1998). Deceptive and unfair trade.*Nigerian Journal of Finance and Investment Law*.2 (3), 184.
- Fontaine, M. (2013). Corporate social responsibility and sustainability: The new bottom line. *International Journal of Business and Social Science*, 4 (4), 112 Retrieved from www.ijbssnet.com
- Gebler, D. (2012). Business ethics and social responsibility.Retrieved from http://managementhelp.org/email/form-to-provide.feedback.htm.
- Githui, D. M. (2014). Ethical issues in advertising and marketing: An empirical analysis of the hindrances to efficient marketing and product communication management in Kenya. *European Journal of Business and Innovation Research*, 1(4), 9-19.

Hub Team.(2015). Cross River State. Retrieved from http://www.crossriverstate.com Mirvis, P., DeJong, D., Googins, B., Quinn, L., & Velsor, V. E. (2010) Responsible leadership emerging. Retrieved from http://www.grli.org.

- Murphy, P. E. (2014). *Marketing ethics at the millennium: Review, reflections and recommendations*. Notre Dame Department of Marketing Mendoza College of Business University of Notre Dame 46556 Patrick.E.Murphy.72@nd.edu.
- Nicole, F. (2015). What is corporate social responsibility? Retrieved from www.businessnewsdaiiy.com/4679-corporate-social-responsibility.html

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Engaging in Corroporate Social Responsibility Practices ...

- Onwuegbuchi, C. (2009). *Telecom operators as socially responsible organizations*. Communications week media Ltd. Nigeria communications week.Com.
- Schneider, T. E. (2010). Is environmental performance a determinant of bond pricing? Evidence from the US pulp and paper and chemical industries. *Contemporary Accounting Research Journal*, 20 (1), 1-25.
- Sharmin, S., Khan, N. A., & Belal, A. R. (2014). Corporate community involvement in Bangladesh: An empirical study. *Corporate social responsibility and environmental management*, 21(1), 41-51. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/csr.1304/full
- Stites, J. P., & Michael, J. H. (2011). Organizational commitment in manufacturing employees: Relationships with corporate social performance. *Business & Society*, *50*(1), 50-70.
- Tammy Galloway (2018). What Are Financial Institutions? Retrieved from https://study.com/academy/subi/business.html
- Uadiale, O. M., & Fagbemi, T. O. (2011). Corporate Social Responsibility and Financial Performance in Developing Economies: *The Nigerian Experience*.Retrieved from conferences.online.com.
- University of Southern California. (2014). Business ethics and corporate social responsibility tags: Accounting, business, careers, crocker, csr, ethics.Retrieved fromhttp://libguides.usc.edu/csrPrint Guide
- Yusuf, F. A. O. (2012). Corporate social responsibility in Nigeria.Retrieved from http://www.ibanet.org.

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SAFETY PRACTICES OF INDUSTRIES IN THREE AREAS OF SPECIALTIES IN TECHNICAL EDUCATION

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Abstract

This study appraised the safety practices of industries in the three out of the six major areas of Technical Education, which span across building, mechanical, and electrical technology industries. Two research questions and two null hypotheses, tested at 0.05 level of significance guided the study. A 15-item questionnaire, meant to ascertain the safety practices in the workplace was administered to 30 factory workers in the three industries in three areas of technical education. The instrument which was validated by experts, yielded a reliability coefficient of 0.87. Mean was used to analyze data to answer the research questions, while Analysis of Variance (ANOVA) was employed to test the hypotheses. Findings showed that the prevalence of accident in industries is not because of absence of safety equipment, but a combination of careless attitude of workers, and employers' failure to enforce compliance to safety rules. The study also revealed that safety practices in an industry does not depend on the type of work it engages in. The findings have implications for technical education practitioners. Amongst others, it was recommended that industries should provide adequate measures to safeguard the health of workers.

Keywords: Safety Practices, Industries, Technical Education

Introduction

Historically, Vocational and Technical Education has been a means of preparing workforce for industries and a means to improve the formation of human capital, increase productivity and employment. Vocational and technical education is defined in the National policy on Education as a comprehensive term, referring to those aspect of educational process, involving in addition to general education, the study of technologies and related sciences and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economics and social life (Federal Republic of Nigeria, 2013). It further explains Vocational and Technical Education to be a means of preparing for occupational field and for effective participation in the world of work. One of the goals of the policy concerning

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Technical Education is to provide trained manpower in applied science, technology and technical levels that will make use of skills necessary in industries for agricultural, commercial and economic development.

The practical instructions given to those who are going to be employed in commerce and industries or allied type of enterprise using tools and machinery, for the purpose of production, preservation and distribution of goods and services is known as Technical Education. Oyenuga (2003) noted that Technical Education is a discipline that trains the manpower needed in production section of industries, and works as an agent that turns technology into what plays a highly important role in our society. Technical Education is offered in the Colleges of Education, some Polytechnics, and Universities. Although it is classified into different areas of specializations, this study focuses on the common areas of specialization for the purpose of giving distinctions and focus into various occupational areas that learners can venture into. The three areas are building/woodwork technology, electrical/electronic technology, and automobile/metalwork technology. Learners who go through the Technical Education programme can either demonstrate the skills they acquired in relevant industries as employees, or choose to be self-employed, thereby contributing their quota to the socio-economic development of the country.

Due to industrialization, many industries have emerged with sophisticated working equipment, and the use of harmful substances for production (Taiwo, 2005). This development has led to incessant cases of accident in the industrial establishments. According to Falae, cited in Fagbemi (1997), it is highly improbable that any family exist in Nigeria which has not experienced the anguish of the sudden loss of a beloved one as a result of accident that could have been avoided. Workplace accident statistics in Table 1 below shows that people experience more physical problems at work.

Table 1

Accident Statistics	
Workplace Accident	Statistics
Deaths occurring from occupational accidents and work-related	2.2 Million
diseases across the globe yearly	
Occupational accidents	270 Million
Work related disease incidents	160 Million
Deaths from workplace accidents	350,000
Deaths from workplace diseases	1.7 Million

Source: International Labour Organization Factsheet, (2012)

Accidents cost millions of lost man-hours of production each year, but this is a mild problem when compared with the immeasurable cost of human suffering. Victims of industrial accident may be blinded, maimed for life, or confined to hospital

bed for months or even death. According to Safety Management Services (2002), accidents do not just happen; they are caused by unsafe acts of people and unsafe conditions. One cannot think of a single accident that could not have been prevented by care and forethought on somebody's parts. Kadiri (2006) observed that safety is often not recognized in the top of priorities when it comes to building and managing industries. Thousands of accidents occur in the engineering environment every day and so many lives have been lost or rendered useless due to this occurrence (Taiwo, 2005).

Another statistics gathered by Safety Management Services (2002) show that of every three accident which occur, two are caused by the personal element of the victim, and one by every means beyond the individual's control. Accident is mostly caused by unsafe acts such as horseplay, untidiness, overconfidence, thoughtlessness, forgetfulness, inattentiveness, and unsafe condition in the working environment, which increase the employees' chances of having accident (Gadds & Collins, 2002). US Department of Labour (2009) also revealed that unsafe acts of people account for approximately 80% of all accidents while unsafe conditions account for about 20%.

Kadiri (2006) explained that some employers assume little responsibility for the protection of worker's health and safety. Some do not even know that they have moral and legal responsibility to protect their workers. Generally, lack of attention to safety practices such as using prescribed safety equipment, turning off equipment after work, provision of medical and first aid facilities among others, undoubtedly creates inherent unsafe situations in the process that leads to disastrous accidents. Workers have a fundamental right to life, their families and dependants also do not have to suffer anguish due to loss of their own. Also, employers do not need to use what ought to be the profits from their employment or investment from other sources in settling victims families as compensation for accidents.

It is a basic human right to return home from work in good health. Workers deserve a safe workplace, an environment where their wellbeing-- physical, mental and social is promoted and maintained to the highest degree. Good safety practices will reduce materials wastage, increase productivity, save money that will otherwise be spent on personnel injury or death, claims, legal fees and government penalties; which can exact heavy toll on company's resources. The nation at large will also benefit because the success of industries will consequently impact the economy positively. In the light of these, safety practices of industries in industrial establishments were investigated.

Research Questions

The following research questions guided the study:

- 1. What is the level of adequacy of safety measures in the selected industrial establishments?
- 2. What is the attitude of workers to safety measures in the selected industrial establishments?

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Hypotheses

The following null hypotheses were tested at 0.05 level of significance

- 1. There is no significance mean difference in the responses of workers in the three industries on the adequacy of safety measures.
- 2. There is no significance mean difference in the responses of workers in the three industries on their attitude to safety rules.

Methodology

This research was a survey research design to appraise the safety practices of selected industrial establishments in relation to the areas of Technical Education. According to Olaitan and Nwoke (2004), a survey research is one in which the entire population or representative sample is studied by collecting and analyzing data from the group through the use of questionnaire. Survey research was considered suitable because the study sought for information from the workers in the three industries with the aid of questionnaires. The study was carried out in Ogun State, Nigeria. Three industries were purposively selected, each from the building, mechanical and electrical industry, to represent industries in the three out of the different major areas of Technical Education. The population for the study consists of 97 factory workers in these industries. Non-proportionate stratified random sampling was used to select 10 workers randomly from each of the three industries, making a total number of 30 respondents. A structured questionnaire was used for data collection. The questionnaire was subjected to face validation by three technical education experts while the reliability of the instrument was established using Cronbach's alpha (α) formula and it yielded a reliability coefficient of 0.87. Mean was used to analyze the data to answer the research questions. Nominal values were assigned to different scaling items of the questionnaire and corresponding mean scores were interpreted using real limit of numbers. Concerning the limit for agreement or rejection, any item statement that had a mean score of 3.50 and above was regarded as Strongly Agreed, 2.50-3.49 as agreed, 1.50-2.49 as Disagreed, and 0.50-1.49 as Strongly Disagreed. aLSO, Analysis of Variance (ANOVA) was employed to test the hypotheses at 0.05 level of significance. The null hypothesis was upheld when the probability (p) value is greater than, or equal to the preset alpha level (0.05), and otherwise rejected. (i.e. Significant at p < 0.05, Not significant at $p \ge 0.05$).

Results

The results for the study were obtained from the research questions answered and hypotheses tested.

Research Question 1: What is the level of adequacy of safety measures in the selected industrial establishments?

			Mechanical Industry		Woodwork Industry		ectrical dustry
S/N	Item Description	$\overline{\mathbf{X}}$	Remark	X	Remark	X	Remark
1	The company trains workers to be safety conscious	3.28	Agree	3.38	Agree	3.35	Agree
2		3.36	Agree	3.23	Agree	3.38	Agree
3	The company provide proper lighting in the workshop	3.47	Agree	3.35	Agree	3.32	Agree
4	The company ensure physical comfort of workers	3.35	Agree	3.32	Agree	3.33	Agree
5	There is adequate information on the use of harmful substance	3.47	Agree	3.35	Agree	3.49	Agree
6	The company respond to all accident and injuries in times	3.35	Agree	3.25	Agree	3.39	Agree
7	The company enforce safety rules	3.38	Agree	3.33	Agree	2.25	Disagree
8	There is adequate ventilation in the workshop	3.35	Agree	2.45	Disagre e	2.68	Agree

Table 2

Eight questionnaires items were used to elicit the opinion of workers on the level of adequacy of safety measures available in the industries. The data in Table 2 shows that all the workers in the three industries were almost of the same opinion on the provision of safety measures in their workplace. However, workers in the electrical industry pointed out that compliance to safety rules are not enforced in their industry. In the same vein, workers in the woodwork section complained of poor ventilation of their workshop. Workers in the three industries agreed on the adequacy of all other safety measures in their workplace.

Research Question 2: What is the attitude of workers to safety measures in the selected industrial establishments?

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Table 3Attitude of workers to the safety measures

		Me	Mechanical		oodwork	Electrical Industry		
		Ir	Industry		ndustry			
S/N	Item Description	Item Description X Remark		$\overline{\mathbf{X}}$	Remark	$\overline{\mathbf{X}}$	Remark	
9	Workers use safety equipment provided by the company.	3.35	Agree	3.39	Agree	3.27	Agree	
10	Workers promptly report any faulty equipment	3.38	Agree	3.35	Agree	3.44	Agree	
11	Workers compulsory use safety equipment	2.32	Disagree	2.33	Disagree	3.14	Agree	
12	Workers participate in rough play in the workshop	3.33	Agree	3.38	Agree	3.25	Agree	
13	Workers follow instructions attached to materials and equipment	3.49	Agree	3.30	Agree	3.22	Agree	
14	Workers consider the welfare of others at work	3.39	Agree	3.27	Agree	3.37	Agree	
15	Workers obey safety rules	3.25	Agree	3.43	Agree	3.33	Agree	

Table 3 above reveals that workers in the three industries agree to their compliance to the safety rules laid down in their workplace, with the exception of workers in mechanical and woodwork industries, who believed that obedience to safety rules is not compulsory.

Hypothesis 1: There is no significant mean difference in the response of workers in the three industries on the adequacy of safety measures.

 Table 4

 Analysis of Variance (ANOVA) of the responses of workers in the three industries on the adequacy of safety measures

Variation Sources	Sum Squares	of	df	Mean Squares	F	Sig.	Remark
Between Groups	0.247		2	1.12	0.027	.035	NS
Within Groups	122.5		27	3.54			
Total	155.48		29				

The results presented in table 4 revealed no significant (NS) difference in the mean responses of workers in the three industries on the adequacy of safety measures, (F=0.03, p>0.05). Therefore, the null hypothesis was not rejected at 0.05 level of significance.

Hypothesis 2: There is no significant mean difference in the responses of workers in the three industries on compliance with safety rules.

Table 5	
Analysis of Variance (ANOVA) on the responses of workers in the th	ree
industries on compliance with safety rules	

Variation Sources	Sum Squares	df	Mean Squares	F	Sig.	Remark
Between Groups	0.19	2	1.10	0.042	.027	NS
Within Groups	60.8	27	3.23			
Total	60.99	29				

The results presented in table 5 revealed no significant (NS) difference in the mean responses of workers in the three industries on their compliance to safety rules, (F=0.04, p>0.05). Therefore, the null hypothesis was not rejected at 0.05 level of significance.

Summary of Findings

The following are summary of the findings:

- 1. Few industry workers, even after providing safety measures and equipment, failed to enforce the safety rules among their workers.
- 2. Few industries actually failed to provide adequate safety measures for their workers. An example is that of the woodworking industry that was not well ventilated.
- 3. Workers claim to be adherent to safety rules.
- 4. Safety practices are not determined by the type of work an industry engages in. This is because, there was no significant difference in the responses of workers in the three industries on the level of adequacy of safety measures and compliance to safety rules.

Discussion of Findings

Findings revealed that some industries, even after providing safety measures and equipment, failed to enforce the safety rules among their workers. This posture may appeal to the attitude of indiscipline, disobedience, and lack of self-control in some workers; which could make them disregard the use of safety kits and equipment. This will expose the workers and the employers to the undesirable effects of workplace accidents. This finding is in line with the report of US Department of Labour (2009) that employees often fail to enforce the Occupational Health and Safety (OSHA) standards. McCornick and Sander (1993), further noted that a good safety skill programme together with built-in compliance in proper tool, equipment, and material usage, can often reduce the incidence of injuries, material wastage and cumulative effect traumas.

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Findings also revealed that some industries actually failed to provide adequate safety measures for their workers. An example is that of woodworking industry that was not well ventilated. This is in consonance with the observation of Kleiman and Turner (2006), that despite laws designed to ensure safety in the workplace, accident rates in companies are alarmingly high due to equipment insufficiency, use of inappropriate equipment, safety devices being removed or inoperative, and the lack of such thing as engineering controls, respiratory protection, and protective clothing.

From this study, it was also found that some workers believe it is not compulsory to use safety equipment. Workers nonchalant attitude may probably be because accidents do not occur frequently in the workplace. This is in line with the paraphrased account in the Amplified Bible (1987), in the book of Ecclesiastes 8:11 that because the sentence of foolish living is not speedily executed, men's heart are fully set to continue in it.

Furthermore, based on the findings of the study, safety practices are not determined by the type of work an industry engages in. This is because, there was no significance difference in the responses of workers in the three industries on the adequacy of safety measures and compliance to safety rules. This is line with the findings of Gadds and Collin (2002) that safety culture in an organization is a product of individual and group values, attitudes, perceptions, competencies, patterns of behavior, and this determines the commitment to an organization's health and safety management. Safety practices in an organization is dependent on more complex factors, as exemplified above, rather than the type of work the industry engages in.

Conclusion

Based on the result of this study, it is concluded that safety practices are inevitably essential for workers in the industrial establishments that are related to the major areas of Technical Education. This study also concludes that accident in industries is not majorly because of absence of safety equipment, but failure to ensure compliance of workers by the employers. Thence, accident should be avoided in the school workshop of the areas of specialties in Technical Education.

Recommendations

The following recommendations are suggested based on the findings of the study.

- 1. Industries should provide adequate measures to safeguard the health of their workers; they should comply with national requirements on factory operations. This is for the benefit of their workers and their business profitability.
- 2. Employers should devise a strategy of monitoring compliance with safety rules. This is important in order to change the safety culture of their employees.

3. Workers should frequently be reminded of the need to safeguard their lives by observing safety rules at all times. Current reports of worldwide workplace casualties should be made available to workers.

References

- Fagbemi, B. S. (1997). Accident causation and prevention. *Journal of Risk Manager*, 2(1), 15-25.
- Federal Republic of Nigeria (2013).*National Policy on Education (Revised)*. Lagos: Federal Ministry of Information Printing Division.
- Gadds, S., & Collins, A. M. (2002). *Safety culture.A review of literature*. Sheffield: Human Factor Group.
- International Labour Organization.(2012). Fact sheet on occupational health and safety.ILO Geneva. Retrieved February 20, 2014 from safetyemporium.com/ilofactsheet
- Kadiri, S. A. (2006). *Safety handbook for engineering and applied professionals*. Lagos: Supreme Publishers Limited.
- Kleiman, L.S., & Sander, M. C. (2006). Safety practices in the workplace. USA: Encyclopedia for Business.
- McCornick, J. E., & Sander, M. S. (1993). *Human factors in engineering and design*. New York: McGraw Hill.
- Olaitan, S. O. & Nwoke, G. I. (2004).*Practical research methods in education*. Onitsha: Summer Educational Publishers.
- Oyenuga, A. O. (2003). Understanding Vocational and Technical Education: A Historical Perspective.In J. O. Olusanya, A. Ajani & A. O. Oyenuga (Eds), *Fundamentals of* vocational and technical education (pp. 22-24). Ogun: Over-to-God Publishers.
- Safety Management Services (2002). *The safety edge*. Retrieved January 19, 2014 from http://www.sonsink.com/igear/safety.
- Taiwo, O. A. (2005). Assessment of safety measures in West Africa portland cement. Unpublished BSc. Project, University of Agriculture, Abeokuta.
- The Amplified Bible (1987). Ecclesiastes 8:11. Michigan: Zondervan Publishers.
- US Department of Labour (2009). Occupational safety and health administration (revised). Washington DC: OSHA3075. Retrieved February 19, 2014 from http://agency.osha.US.int/publications

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EFFECTIVENESS OF DEMONSTRATION METHOD IN ENTREPRENEURSHIP EDUCATION IN TERTIARY INSTITUTIONS IN SOUTH -SOUTH NIGERIA

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Abstract

The study assessed the effectiveness of demonstration method in entrepreneurship education in tertiary institutions in South-South Nigeria. The objective of the study was to determine the effectiveness of the demonstration method in teaching entrepreneurship education in tertiary institutions in South-South Nigeria. A descriptive survey method was adopted. Questionnaire was used to sample opinions of 684 lecturers selected by stratified random sampling from a total population of 13,607 lecturers. The results of the study were presented using tables and frequencies. Analysis of variance was used in analyzing the hypothesis. The findings indicate that demonstration method was effective in teaching entrepreneurship education in tertiary institutions in South-South Nigeria. Based on the findings, it was concluded that using demonstration method in teaching entrepreneurship education is effective. It was recommended that entrepreneurship education lecturers should make concerted efforts to use demonstration teaching method that is considered effective in teaching their students.

Keywords: Entrepreneurship, Education, Demonstration, Tertiary Institution, Nigeria

Introduction

Entrepreneurship is the willingness and ability to seek out investment opportunities, establish and manage an enterprise successfully. It is the ability of an individual to earn a living through self employment rather than waiting for opportunities for paid employment. Entrepreneurship is a process by which individuals (either on their own or within organizations) pursue opportunities (Stevenson & Jarillo, 2010).

According to Amusa (2010) entrepreneur is a person who assumes responsibility and the risk for a business operation with the expectation of making profit. Entrepreneurship education is the type of education that is meant for productive investments in the development of human capital resources (Onoh, 2006). Entrepreneurship education seeks to prepare people, especially youths, to be responsible and enterprising individuals who become contributors to economic

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development and sustainability of their communities. Entrepreneurship education is like an energizer or re-kindling tool that awakens the spirit of entrepreneurship. Entrepreneurship education is an inspiring framework for actualization of self reliance.

The need for entrepreneurship education started emerging in the mid 1980s. This is because before this period, unemployment and poverty were not of national concern as they are currently. In the mid-1980s, the Nigerian economy apparently collapsed while youth and graduate unemployment reached its peak (Azizi, 2009). There was large-scale layoff of workers and early retirements as a result of Structural Adjustment policies and bad economic trends in the country. The Structural Adjustment Programme (SAP) also meant a considerable reduction in public sector job placements thus leading to graduate unemployment and or under-employment, with consequent implications on youth restiveness and insecurity of life and property. There are several methods of teaching entrepreneurship education, which demonstration is one of the methods.

Demonstration teaching method is an instructional delivery system whereby a lecturer does something in the presence of students in order to show them how to do it or to illustrate the principle. Okon and Ibanga (2010) maintained that demonstration method is a technique of teaching concepts, principles, or real things by combining oral explanation with manipulation of real things, equipment or materials. Job and Akpan (2010) asserted that demonstration teaching method helps the students to understand lessons very clearly since they combine the sense of sight, hearing, smell, taste and touching while learning. Demonstration method is the process of teaching through examples or experiments, and it is affected by the practical experience of the lecturers. It may be used to prove a fact through a combination of visual evidence and associated reasoning. Demonstration helps to raise student interest and could reinforce memory retention because it provides connections between facts and their real world applications. According to Megha (2010), demonstration is a step by step explanation along with their reason and their significance for better understanding for the students. Demonstration method is usually used to illustrate how a process, procedure or experiment is executed so as to aid the learner in acquiring the skill. This is one of the most effective methods of teaching skills. It provides visual experience for the students for easy understanding of the concepts taught.

Statement of the Problem

It is quite disturbing that the realization of the noble objectives of entrepreneurship education still remains a mirage. Several factors such as lack of practical experience of the lecturers and facilities for demonstration during lectures can be responsible for this mirage in entrepreneurship education. It is generally believed that if students do not learn well, it is because lecturers have not taught well. This means that students can only learn well when teaching method is effective, and teaching effectiveness depends on the ability of a lecturer to adopt suitable teaching

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methods. One of those teaching methods is the demonstration method which appeals to the sense of sight, smell, touch and hearing while the students strive to learn. There is therefore need to assess the effectiveness of the demonstration method in teaching entrepreneurship education by practicing lecturers (UNDP, 2006).

Purpose of the Study

The purpose of this study was to determine how effective demonstration method is for teaching entrepreneurship education by lecturers in tertiary institutions in south-south Nigeria.

Research Question

1.

How effective is demonstration method in teaching entrepreneurship education in tertiary institution in South-South Nigeria.

Hypothesis

The following null hypothesis was tested at 0.05 level of significance:

1. Respondents do not differ significantly in their mean ratings on how effective they consider demonstration method for teaching entrepreneurship education based on years of experience (0-5; 6-10; above 10 years).

Teaching Methods

Teaching methods are strategies adopted by the teacher to ensure that effective learning takes place (Ogu, 2010). The methods are often divided into two broad categories namely: teacher-centred methods also called direct instruction, and learnercentred methods also called indirect instruction or inquiry-based learning (Offiong, 2010). From among these methods, a lecturer selects a method or combination of methods most likely to achieve a particular lesson's objectives with a particular group of students (Ogu, 2010). According to Offiong (2010), direct instruction is based on the assumption that the best way to teach is with scripted lesson plans that cannot be changed. Direct instruction gives total control of classroom activities to the lecturer. Students are not allowed to participate actively in the lecture method. Direct instruction is used to help students acquire knowledge and action sequences while indirect instruction, which involves inquiry-based, problem-solving, and project-based learning, is used to enhance student's understanding of the physical, social, and psychological world in which they live. In addition to different goals, the two methods of teaching are derived from different theories about learning and employ different practices.

In the context of this study, methods of teaching refer to a set of strategic activities employed by the lecturer to transfer knowledge, skills and positive attitude aimed at turning the learner into an entrepreneur upon graduation.

Review of Related Literature

Teaching is an academic interaction between a more knowledgeable person and less knowledgeable one designed to enhance the learning of the latter. Teaching method on the other hand is a systematically arranged activities designed to enhance impartation of instruction to the learner. There are many teaching methods usually adopted by teachers to carry out teaching of which demonstration method is one of them.

Udoetuk (2006) described demonstration teaching method as an effective approach of teaching used in experiments involving the use of sophisticated, delicate and expensive materials and equipment which the teacher cannot afford to leave in the hands of inexperienced students for fear of being damaged. The method gives the learner the opportunity to see and hear the details of the skill being taught. Those details as listed by Eze (2009) include (a) the necessary background knowledge (b) the step or procedure (c) the nomenclature and (d) the safety precautions.

According to Okoro (2010), the concept of demonstration is to illustrate how a process, procedure or experiment is executed so as to aid the learner in acquiring the skill. Okoro further described it as the best or the most effective method of teaching entrepreneurship education because it actually shows how entrepreneurial skills are acquired, and provides opportunity for students' practical experiences in performing some skills themselves.

According to Scribd (2010), when a lecturer speaks clearly, uses simple, direct and dynamic demonstration, it sparks a great deal of interest, motivation, curiosity, humour and attention in learners. The author however warned that learners can develop a lack of confidence in the teacher if the demonstration fails. Beal (2008) opined that a poorly conducted demonstration can be an agent of harm. It is the reason learning theories suggest caution and are apprehensive of incorporating demonstration into the entrepreneurship curriculum. This reluctance is also due to the convenience factors of time and cost. The consequences of misusing demonstration, visibility, audibility and large classes are also some of its problems.

Miller and Rose (2007) observed that demonstration teaching method as a major teaching method used in courses in which high degree of accuracy and skilled performance in use of tools and materials is required. Entrepreneurship is one of such courses. Demonstration teaching method is an effective method that is generally employed to explain a principle and show the steps or procedure of a mechanical operation, or illustrate ideas and relationship with the aid of teaching aid and devices. Consequently, Akpan (2014) offered the following general hints for successful demonstration to teachers of entrepreneurship.

1. Every effort should be made to get the learners to observe the correct procedure the first time new task is taught. Akpan believes that the most effective learning results when the learners use a skill immediately after they are taught. It is therefore necessary that learners be made to practice or

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demonstrate new skills as soon as they are taught the procedure for performing it.

- 2. Safety precautions should be emphasized in each step of procedure. It is mandatory that the reasons for the precaution be stated so that the learner may understand the need for compliance.
- 3. The teacher should cultivate the virtue of being patient during demonstration procedure in order to carry every student along. Without patience, the slow learners may not acquire the knowledge or skill the teacher is trying to impart. Teacher's tone of voice and manner during demonstration determine the attitude of the learner more than the exact method used. Teachers should be fair, firm and friendly. Do not rush; do not be impatient and demanding during demonstration.

According to Offiong (2010) demonstration method can occur in any of the under-mentioned shades:

- a. Teach-Demonstration: Under this, the teacher performs the activities while the students watch, listen and record observation.
- b. Teacher-Student Demonstration: Here the students assist the teacher in direct handling of the facilities for demonstration.
- c. Students Group Demonstration: In this case, the students are divided into groups to assist the teacher in turn to perform the demonstration.
 The strengths of the demonstration method as presented by Job and Akpan (2010) include:
 - a. Demonstration method helps the students to understand lessons very clearly since they combine the sense of sight, hearing and touching while learning.
 - b. The demonstration method raises students' interest and reinforces memory retention.

The weaknesses of the demonstration as presented by Scribd (2010) include:

Demonstration method is hazardous when proper observation of cautious and safety rules are not taken by the lecturers and students.

Method

The research was carried out using survey design. Since the study involves collection of opinions of tertiary institution lecturers in south-south Nigeria on the effectiveness of demonstration method in teaching entrepreneurship education, survey design was considered appropriate. This study was conducted in South South Nigeria which is made up of six States of Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers. The population of this study consisted of all 13,607 lecturers in all the public tertiary institutions in the study area.

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A sample size of 684 was selected using stratified random sampling technique. The stratification was based on institution type and ownership. Five percent of the population was selected from the universities, polytechnics and colleges of education using simple random sampling technique where each subject was selected from a list/stratum of the total population of lecturers in the tertiary institutions in the zone at a five percent level.

A structured questionnaire developed by the researcher and titled "Questionnaire on Effective Methods for Teaching Entrepreneurship Education (QEMTEE)" was used for data collection. The instrument (**OEMTEE**) was validated by three experts; one from the Department of Technology and Vocational Education, Namndi Azikiwe University, Awka and two from the Department of Measurement an Evaluation, University of Uyo. The research topic, purpose of the study, research questions, hypotheses and the instrument were given to the experts who were requested to critically examine the instrument for relevance of content, suitability of instructions and clarity of statements. They made very useful suggestions such as modifying the title of the instrument, rearranging some sections and cancelling some items. Their inputs were reflected in the final copy of the instrument.

The researcher administered 684 copies of the instrument with the aid of two research assistants in the tertiary institutions covered in the study. The research assistants were adequately briefed on what to do. To ensure a high response rate, the researcher and research assistants reminded the respondents through telephone calls to complete and return the questionnaires. At the end, about 94% retrieval was made since 643 copies of the instrument were retrieved and used for data analysis. Data in respect of the research questions were analyzed using mean and standard deviation . Decision on the items and the research question were based on the items and cluster means based on the real limits of numbers below:

Values	Real limit
5	4.50 - 5.00
4	3.50 - 4.49
3	2.50 - 3.49
2	1.50 - 2.49
1	1.00 - 1.49
	5 4 3

Inferential statistics of one way analysis of variance (ANOVA) was used to test all the null hypotheses at 0.05 level of significance. A null hypothesis was accepted where the calculated F-value was less than the F-critical value and rejected where the calculated F-value was equal or greater than the F-critical value.

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Results Research Question

How effective do tertiary institution lecturers in South South Nigeria consider demonstration method for teaching entrepreneurship education?

Table 1

Respondents' Mean Rating and Standard Deviation on Effectiveness of Demonstration Method for Teaching Entrepreneurship Education N=643

S/N	Components of entrepreneurship education	Mean	SD	Remark
1	Application of entreprenurial concepts.	4.11	.80	Е
2	Stimulating entreprenurial drive.	4.00	1.20	Е
3	Qualities for entreprenurial success.	4.03	1.40	Е
4	Acquiring business management skills.	3.93	1.40	Е
5	Developing innovative skills.	3.90	1.39	Е
6	Handling business risks	3.21	1.22	ME
7	Acquiring ICT skills for business.	3.61	.91	Е
8	Causes of business failure.	3.87	.84	Е
9	Business expansion strategies.	3.40	1.11	ME
10	How to manage competition in business.	2.71	1.31	ME
11	How to avert business failure.	3.71	1.33	Е
12	Customer retention skills.	2.81	1.94	ME
	Cluster mean	3.61		Ε

Key: E= Effective, ME = Moderately Effective

Table 1 shows that the respondents considered demonstration method effective for teaching entrepreneurship education with a cluster mean of 3.61. Standard deviation for all the items except the first is within the same range showing that the respondents are homogenous in their views.

Testing of hypothesis

Respondents do not differ significantly in their mean ratings on how effective they consider demonstration method for teaching entrepreneurship education based on years of teaching experience (0-5; 6-10; above 10 years).

ANOVA Summary on Influence of Experience on how Effective Respondents Consider Demonstration Method for Teaching Entrepreneurship Education								
Source	Sum of	Df	Mean	\mathbf{F}	Sig.			
	Squares		Square					
Teaching	446.000	2	233.000	.515	.613			
Experience								
Error	276924.16	640	432.694					
Total	277370.16	642						

The results in Table 2 indicate that the calculated F-value of .515 is less than the F-critical value of .613. This means that the respondents do not differ significantly in their mean ratings on how effective they consider demonstration method for teaching entrepreneurship education based on experience. Therefore, the null hypothesis was not rejected.

Discussion of findings

Table 2

Findings of this study showed that tertiary institution lecturers in South South Nigeria considered demonstration method effective for teaching entrepreneurship education. The findings are in agreement with the study of Solomon, Blankmeyer, Tennial and Garczynski (2015) who conducted a study to examine the effectiveness of four teaching methods (lecture, demonstrations, discussions, and case study) in the classroom. As each method offers different benefits to the instructor and students, each method was expected to aid in a different depth of learning. The findings of the study indicated that each teaching method has its own unique benefits and is effective for various levels of learning. Additionally, the findings of the study supported the notion that active methods do aid in increasing learning. Demonstration method led to higher overall scores than any other teaching method. The findings are also in line with Roadruck (2008) who posited that modern day philosophers support the use of demonstrations for improved teaching of practical skilled courses like entrepreneurship education. The method gives the learner the opportunity to touch in addition to the general opportunity of seeing and hearing of the details of the skill being taught. The findings are also in line with Eze (2009) who maintained that the repetition steps involved during demonstration helps the average and slow learners as it gives them an additional opportunity to see, hear and be reminded of the skill being The performance steps during demonstration give all the learners the taught. opportunity to become skillful because it affords them the chance to demonstrate the task by themselves. In other words, demonstration teaching method claims its popularity because it leaves nothing to chance. The findings aligns with the views of Beal (2008) who pointed out that the teacher must connect the abstract with the concrete and reveal the "tricks of the trade" during the presentation. The findings further showed that experience did not significantly influence the views of the respondents. This shows that most lecturers are beginning to imbibe the

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entrepreneurship culture which is a panacea to youth restiveness and job creation. This study contradicts the findings of Koontz (2007) who, posited that experienced teachers prefer demonstration to younger teachers. In the present study, both the experienced and inexperienced lecturers did not differ significantly on how effective they considered the demonstration method as they all considered it to be effective. The findings of the study is in line with Ogwo and Oranu (2006) who were in support of demonstration teaching method as the most effective method for impartation of practical skills.

Conclusion

In view of the findings of the study, it was concluded that the use of demonstration method is effective in teaching entrepreneurship education in tertiary institutions in south-south Nigeria.

Implication of the Study

Findings of the study have implication for entrepreneurship education in tertiary institutions since the course has been made mandatory for all categories of students. The implication is that lecturers need to consistently adopt demonstration method that is considered effective for teaching the course to enhance easy understanding by the students.

Recommendations

Based on the findings of the study, the researchers proffer the following recommendations

- 1. Entrepreneurship education lecturers should make concerted efforts to demonstration method that is considered effective in teaching their students.
- 2. Managers of tertiary education should provide adequate facilities in the institutions to encourage the lecturers to adopt demonstration method that is considered effective in teaching entrepreneurship education irrespective of the cost.

References

Akpan, L. P. (2014). Demographic variables and counselling effectiveness of secondary school counsellors in Akwa Ibom State, Nigeria. Unpublished PhD Thesis, Department of Educational Foundation, Guidance and Counselling, University of Uyo, Akwa Ibom State.

Amusa, T. U. (2010). Agile estimating and planning. Upper Saddle River, NJ: Prentice Hall.

Beal, C. A. (2008). Playing entrepreneurship: Can games make a difference? *Entrepreneurial Practice Review*, 2(4), 4-18.

- Eze, A. E. (2009). Effect of guided-discovery mode of instruction on secondary school financial accounting learning. *Journal of the Science Teacher's Association of Nigeria*, 21(1), 147-154.
- Job, I. A. and Akpan, E. A. (2010). School farm programme implementation in Akwa Ibom State. *Journal of Association of Business Educators of Nigeria*, 1(1): 87-91.
- Koontz, C. (2007). *School administration and teacher work experience*. Athens: Top Height Publishers.
- Megha, S. D. (2010). Entrepreneurship: In and out. Kano: Bolaele Nigeria Enterprise.
- Miller, R. A. & Rose, P. (2007). Entrepreneurship education: A review of its objectives, teaching methods, and impact indicators. *Education and Training*, 52(1), 20 47.
- Offiong, A. A. (2010). Instructional approaches, student's characteristics and academic performance in livestock production in secondary schools in Akwa Ibom State. *Unpublished Ph. D Thesis*, University of Uyo.
- Ogwo, G. and Oranu, R. (2006). Strengths of the business plan and industrial collaboration strategies in the teaching of entrepreneurship in tertiary institutions. *Business Education Journal*, 8(1), 257 260.
- Ogu, N. K. (2010). Assessment practices and students' knowledge profiles in a problembased curriculum. *Learning Environments Research Journal*, 2, 191-213.
- Okon, E. E. & Ibanga, J. (2010). *A Handbook on teacher preparation and classroom teaching*. Calabar: PAICO Press and Books Limited.
- Okoro, A. K. (2010). Entrepreneurship education and training: A survey of literature. *Life Science Journal*, 11(1), 127-135.
- Onoh, A. (2006). Entrepreneurship competencies needed by business education students in managing small scale retail enterprises as a tool for self-employment development and management of records in the Nigerian education system. *Data Management in Schools and Others Issues*, 2(3), 1 10.
- Roadruck, M. (2008). Peer effects, pupil-teacher ratios, and teacher incentives: Evidence from a randomized evaluation in Kenya. Available at: http:// www.harvard.edu/fs/docs/icb.topic436657.files/ETP_Kenya 09. 14.07. pdf. Accessed: July 5, 2014.
- Scribd, O. N. (2010). Correlates of teachers' attritional tendencies in Cross River school system. *West African Journal of Educational Research*, 4(1): 14 18.
- Solomon, G. T. (2010). An examination of entrepreneurship education in the United States. *Journal of Small Business and Enterprise Development*, 14 (2), 168-182.
- Stevenson, T. and Jarillo, U. (2010). Engaging students through the guided-inquiry cycle. In *Proceedings of Redesigning Pedagogy: Research, Policy, Practice, National Institute of Education,* Nanyang Technological University, Singapore.
- Udoetuk, M. (2006). Implicated and called upon: Challenging an educated position of self, others, knowledge and knowing as things to acquire. *Theories and Practices*, 3(1), 26-36.
- UNDP (2006). UNDP evaluation guide. Abuja: Totan Publishers.

Office Competencesies Required of Business Education Graduations

OFFICE COMPETENCIES REQUIRED OF BUSINESS EDUCATION GRADUATES FOR EFFECTIVE PERFORMANCE IN MODERN OFFICES IN IMO STATE

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ABSTRACT

This study was carried out to ascertain the office competencies required of business education graduates for effective performance in modern offices in Imo State. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted for the study. The population of the study consisted of 201 managers in private and public organizations in Imo State. There was no sampling. A structured questionnaire containing 17 items was used for data collection. The instrument was validated by experts in the field of business education in the Department of Technology and Vocational Education and measurement and evaluation unit of the Department of Educational Foundation. Pilot test was used to establish the reliability of the instrument and Cronbach alpha was used to obtain the reliability coefficients of 0.97 and 0.94 for clusters B1 to B2 respectively with an overall coefficient of 0.96. One hundred and eighty nine duly completed copies of the questionnaire were retrieved and used for data analysis. Mean and standard deviation were used to answer the research questions and to determine the homogeneity of the respondents' ratings while the z-test was used to test the null hypotheses. Findings revealed that respondents agreed that electronic publishing and electronic collaborative competencies were required of business education graduates for effective performance in modern offices. The findings also showed that ownership of organizations was not a significant factor on managers' ratings of competencies required of business education graduates for effective performance in modern offices. The researchers concluded that equipping business education students with these competencies will help them to performance office tasks effectively when employed in business organizations upon graduation. It was recommended among others that business education lecturers should lay more emphasis on equipping their students with electronic publishing and electronic collaborative competencies identified by respondents as required by business education graduates for effective performance in modern offices.

Key Words: Office competencies, business education graduates, modern offices **Introduction**

Higher education in Nigeria is the education given to students after secondary education in universities, colleges of education and polytechnics. The aim of tertiary education is to develop students with relevant skills needed to contribute to the development of the society. In recognition of this importance of higher education to the development of Nigerian society, the Federal Republic of Nigeria (FRN, 2013) place a great premium on vocational and technical education of which business education is a sub-set.

Business education which is offered at the universities and colleges of education is concerned with the development of saleable skills to enable an individual to function effectively in the world of work (Onojetah, 2012). Abuokwen (2010) asserted that business education is an education for business or training in business skills required for use in business offices, clerical occupation and business policy analysis. Office education, according to Amoor (2009), is a group of courses designed to prepare an individual to acquire specific skills and competencies for efficient office services.

The dynamism of the 21st century has propelled office education programme in tertiary institutions to emphasize more on preparing students in the current practices shaping today's modern offices. Modern offices are gazetted with information and communication technologies devoid of the manual way of performing office tasks. Nwazor and Onokpaunu (2016) stated that modern offices are automated offices that provide new ways of performing daily business activities. In modern offices, tasks are performed electronically rather than manually. Business education programmes in Nigeria, however, are often criticized for deficiencies in producing competent students needed for optimum performance in technologicallyoriented offices (Jackson, 2013). The outcome is graduates' poor performance in organizations, increase in graduate unemployment rate as well as global economy. Azike (2012) observed that business education programme has continued to produce incompetent graduates who cannot adapt to the technological changes.

Despite universities' efforts in equipping business education students with competencies and knowledge, it appears that the complaints are still prevalent that business education graduates possess little or no competencies for effective job performance in modern offices. So there is need to identify areas of competencies industries mostly required from graduates and incorporate them in the business education curriculum. Competencies are abilities, knowledge, attitudes and facts necessary for accomplishing tasks (Okoro, 2012). The success of business education programmes can be measured by the official duty performance level of graduates of the programme in the world of work. Office competencies for effective performance in modern offices include electronic publishing, electronic collaborative, electronic image processing, electronic communication and database management.

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Electronic publishing competencies enable office workers to work through a document and delete, insert and replace text, and also perform additional features such as creating, formatting, printing and saving of document without much stress (Brain & Stacey, 2010). Electronic publishing competencies are inevitable in the activities of modern offices because they enable office workers to utilize modern office machines for electronic printing of textbooks, journals, articles and newspapers. Electronic collaborative competencies on the other hand enable office workers to communicate without necessarily seeing one another. These competencies enable office workers to understand the benefits of team-work, collaboration and information sharing features of the modern office.

Presently, managers of public and private organizations have areas of emphasis in the selection and appointment of competent employees who would assist them in realizing the corporate objectives of their organizations. This emphasis is usually guided by the needs of the organizations in particular and the society in general. As societal needs are changing every day, it is necessary to develop appropriate competencies to meet them. As changes in technology are dynamic, managers are shifting their emphasis from time to time to suit the technological changes. This means that managers will seek for competencies in order to meet up with the trend in modern offices.

The extent to which graduates of business education possess the required modern office competencies seems to vary on account of managers of various types of organizations. Managers of private organizations could be more concerned with having a workforce of competent graduates with minimal incompetence because they are more profit driven than managers of public offices. In agreement, Odunaike and Amoda (2013) revealed that competency plays a very significant role in driving away the indolent ones in business education professionalism. Akpomi and Ordu (2009) reported that many private business organizations have computers and other modern office technological gadgets. Some however do not have and this affect the productivity of business education graduates in such business organizations. In support, Aliata and Hawa (2014) disclosed among others that the availability and use of modern office equipment will inevitably affect the activities and output of business education graduates in offices and business organizations. Currently, the fact that Nigerian business education graduates are roaming the streets instead of being employed in business offices intensified the need for this study which sought to determine the office competencies required of business education graduates for effective performance in modern offices.

Statement of the Problem

Before the advent of ICT in offices, business education graduates mainly required basic office competencies such as ability to read, write and communicate, keyboarding with speed and accuracy and ability to follow instructions to perform

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office functions. However, the invasion of ICT in offices demands that business education graduates need other competencies in order to fit into the era of technologically induced modern offices. Poor acquisition of these competencies by business education graduates would likely render them unfit for modern office functions. The problem of this study, therefore, is that there seem to be a wide gap between competencies required by business education graduates for effective performance in modern business organizations and what they are being taught in the programme. This could be the reason why many Nigerian business education graduates are roaming the streets instead of being employed in business offices (Azike, 2012). If this trend is not addressed, it could worsen the already existing graduate unemployment rates. It could also lead to non-achievement of objectives of business education programme in tertiary institutions in Nigeria. Based on the foregoing, this study sought to determine the office competencies required of business education graduates for effective performance in modern offices.

Purpose of the Study

The main purpose of the study was to identify office competencies required of business education graduates for effective performance in modern offices in Imo State. Specifically, the study determined:

- 1. electronic publishing competencies required of business education graduates for effective performance in modern offices.
- 2. electronic collaborative competencies required of business education graduates for effective performance in modern offices.

Research Questions

The following research questions guided the study:

- 1. What are the electronic publishing competencies required of business education graduates for effective performance in modern offices?
- 2. What are the electronic collaborative competencies required of business education graduates for effective performance in modern offices?

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 in private and public organizations on the electronic publishing competencies required of business education graduates for effective performance in modern offices.
- 2. There is no significant difference in the mean ratings of managers in private and public organizations on the electronic collaborative competencies required of business education graduates for effective performance in modern offices.

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Method

The design adopted for this study was the descriptive survey design. The study was carried out in Imo State. The population for the study consisted of 201 managers of private and public business organizations in Imo State obtained from the Ministry of Commerce and Industry Imo State. The population was not too large and therefore there was no sampling. The instrument for data collection was a structured questionnaire on a four point rating scale ofStrongly Agreed - 4 Point, Agreed - 3 Point, Disagreed - 2 PointandStrongly Disagreed - 1 Point

The face validity of the instrument was ascertained using the opinions of two experts in business education and one expert in measurement and evaluation. The questionnaire was pilot-tested using 20 managers of private and public business organizations in Abia State who were not part of the population. Data from the pilot test were analyzed using Cronbach Alpha to establish the internal consistency of the instrument which yielded values of 0.97 and 0.94 for clusters B1 to B2 respectively with an overall reliability coefficient value of 0.96. The researcher and three research assistants distributed copies of the questionnaire to the managers of public and private business organizations in their offices. Mean scores and standard deviation were used to analyze data relating to the research questions while z-test was used to test the null hypotheses. A null hypothesis was rejected where the calculated z-value is equal to or greater than the critical z-value; otherwise the null hypothesis was retained.

Results

Table 1

Respondents' mean ratings on the electronic publishing competencies required of business education graduates for effective performance in modern offices N = 189

S/N	Electronic publishing competencies	Mean	SD	Remarks
1	ability to manage files and fonts with Adobe InDesign	3.09	0.81	Agreed
2	skill in formatting documents	3.47	0.63	Agreed
3	ability to apply standard planning tools for printing design	3.40	0.67	Agreed
4	skill in preparing copy from audio recordings for transcriptions	3.24	0.70	Agreed
5	skill in dictating text and commands while using speech recognition software	3.30	0.67	Agreed
6	skills in graphics file specifications	2.93	0.89	Agreed
7	ability to use Pagemaker	3.02	0.75	Agreed
8	ability to design layout of page elements	2.80	0.91	Agreed
9	ability to use illustrations in print designs	2.84	0.87	Agreed

10	ability to use images	2.19	1.03	Disagreed	
	Cluster Mean	3.03		Agreed	

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Table 1 show that out of the 10 items listed on electronic publishing competencies, respondents disagreed on one item (item 10) while they agreed on the remaining nine items. The cluster mean score of 3.03 shows that on the whole, managers of private and public organizations in the area of the study agreed that electronic publishing competencies are required of business education graduates for effective performance in modern offices. The highest deviation (1.03) amongst the responses is observed in item 10. This suggests that respondents are quite divided as to whether business education required ability to use images. There is homogeneity in other items amongst responses indicating a greater consensus of opinion.

Table 2

Respondents' mean ratings on the electronic collaborative competencies required of business education graduates for effective performance in modern offices

S/N	Electronic collaborative competencies	Mean	SD	Remarks
11	Ability to use proofHub to share information about	2.94	0.91	Agreed
	organization's project			
12	Ability to use Mindmeister to plan or brainstorm with	3.16	0.67	Agreed
	colleagues in the organization			
13	Ability to use Google Doc to create and share documents	3.34	0.63	Agreed
	with colleagues in the office			
14	Ability to use SlideRocket to collaborate with colleagues	3.14	0.92	Agreed
	on the same tasks irrespective of location			
15	Ability to use enterprise resource planning to design	3.50	0.57	Strongly
	workflow and communications for collaborative projects			Agreed
16	Ability to use Bigmaker to discuss new business projects	3.16	0.69	Agreed
	online			
17	Ability to use groupware to share ideas and projects with	3.48	0.62	Agreed
	colleagues			
	Cluster Mean	3.24		Agreed

Table 2 show that respondents rated only one item (item 16) strongly agreed while the remaining six items on electronic collaborative competencies are rated agreed. The cluster mean score of 3.24 shows that on the whole, managers of private and public organizations in the area of the study agreed that electronic collaborative competencies are required of business education graduates for effective performance in modern offices. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

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Table 3: Summary of z-test analysis of managers in private and public organizations on the electronic publishing competencies required of business education graduates for effective performance in modern offices

Ownership of Organization	Ν	Mean	SD	df	z-cal	z-crit	Decision
private	118	3.25	0.69				
	18′	7 1.36	1.96	Not	t Significa	nt	
Public	71	3.10	0.79		-		

Table 3 shows that the calculated z - value of 1. 36 is less than the critical z - value of 1.96 (1.36 < 1.96) at 0.05 level of significance and 187 degree of freedom. This means that there is no significant difference in the mean ratings of managers in private and public organizations on the electronic publishing competencies required of business education graduates for effective performance in modern offices. Therefore, the null hypothesis was accepted.

Table 4

Summary of z-test analysis of managers in private and public organizations on the electronic collaborative competencies required of business education graduates for effective performance in modern offices

Ownership of Organization	N Mean	SD df	z-cal	z-crit	Decision
private	118 3.32	0.58			
	187 0.81	1.96 Not Signit	ficant		
Public	71 3.24	0.70			

Table 4 shows that the calculated z - value of 0.81 is less than the critical z - value of 1.96 (0.81 < 1.96) at 0.05 level of significance and 187 degree of freedom. This means that there is no significant difference in the mean ratings of managers in private and public organizations on the electronic collaborative competencies required of business education graduates for effective performance in modern offices. Therefore, the null hypothesis was accepted.

Discussion

Findings of the study indicated that respondents agreed that electronic publishing competencies are required of business education graduates for effective performance in modern offices. The findings of the study is in line with Olayanju and Asogwa (2010) who revealed that just as the business offices have changed as a result of the introduction of ICT in offices, so do business education graduates need to possess electronic publishing competencies such as word processing, data processing and reprographics in order to perform effectively in the offices. In support, Brain and Stacey (2010) posited thatelectronic publishing competencies are required of graduates of tertiary institutions so as to perform job tasks effectively. Brain and Stacey further stated that these competencies enable office workers to work through a

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document and delete, insert and replace text, and also perform additional features such as creating, formatting, printing and saving of document without much stress.

According to Onoyovwi (2007), to be relevant in today's office, electronic publishing literacy are a must for all business education graduates because it has simplified, through mechanization, all aspects of office functions and procedures. Even the much talked about paperless office of today is possible through the use of ICT. Onoyovwi further noted that business education graduates who are not well equipped in terms of new skills and competencies, knowledge and abilities required for today and tomorrow's office are sure to be embarrassed as their inadequate competencies will render them redundant or even throw them out of job.

The findings further revealed that there was no significant difference in the mean ratings of managers in private and public organizations in Imo State on the electronic publishing competencies required of business education graduates for effective performance in modern offices. This agrees with Onasanya et al. (2011) who found that managers generally agreed that graduates (business education graduates inclusive) require electronic publishing competencies to remain relevant in modern offices.

Findings of the study revealed that respondents agreed that electronic collaborative competencies are required of business education graduates for effective performance in modern offices. The findings of this study concurs with that of Roy (2012) which revealed that since electronic collaboration technologies are used to accomplish organizational goals in modern offices, business education graduates require such electronic collaboration competencies as relationship building, communication, collaboration, and internet skills, in order to succeed. Roy further stated that employees require relationship building skills that create team cohesion, sustainable relationships, encourage trust, team familiarity, and create a shared context among diverse team members. Wallar and Papadopoulos (2015) posited that electronic collaboration competencies help employees to decrease the intensity of conflicts, encourage the sharing of information online, build a sense of community, and promote clarity throughout the duration of a company project. Additionally, Vincent (2008) agreed that for graduates to be actively involved in e-collaboration, they need to possess telephone, internet and teleconferencing competencies.

Furthermore, the findings of the study indicated that managers in private organizations and their counterparts in public organizations did not differ significantly in their mean ratings on the electronic collaborative competencies required of business education graduates for effective performance in modern offices. This is in consonance with the findings of Moreover, Jafari, Ahmed, Dawal and Zayandehroodi (2010) which revealed that ownership of organizations did not influence managers' opinions on the electronic collaboration competencies required of business education graduates for effective performance in today's offices. Vincent (2008) in agreement stated that managers viewed possession of electronic collaborative competencies a must for every graduate who wants to succeed in modern offices.

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Conclusion

The findings have shown that employers (managers) want 'well-rounded' graduates with a broad range of competencies for performance in modern offices. The researchers conclude that equipping business education students with these competencies will help them to performance office tasks effectively when employed in business organizations upon graduation.

Recommendations

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

- 1. Business education lecturers should lay more emphasis on equipping their students with electronic publishing and electronic collaborative competencies identified in this study. This will help them to gain employment in modern business organizations upon graduation and perform office functions effectively.
- 2. Business education administrators should periodically organize ICT re-training programmes for lecturers to up-date their electronic publishing and electronic collaborative competencies so as to equip students with these competencies needed to perform job functions effectively on graduation.
- 3. Curriculum planners should review the curriculum of Business Education to incorporate electronic publishing and electronic collaborative competencies as required by the graduates for effective performance in business organizations.

References

- Abuokwen, G. U. (2010). *Electronic office skills required by business education students in universities in Cross River and Akwa Ibom States.* (Published masters degree thesis), Department of Vocational Teacher Education, University of Nigeria, Nsukka.
- Akpomi, M. & Ordu, P. (2009).Modern office technology and the secretary's productivity in private business organizations. *African Journal of Business Management*, 3(8), 333-339.
- Aliata, M. I. & Hawa, S. A. (2014). Modern office technology and the performance of the professional secretary in contemporary organizations in Ghana. *Information and Knowledge Management*, 3(4), 52-57.
- Amoor, J. S. (2009). An evaluation of challenges of secretarial education programme in Nigeria universities between 2000-2009. The information managers.

- Azike, C. O. (2012). Job competencies employers of labour consider necessary for business education graduates in Anambra State. (Published masters degree thesis). Nnamdi Azikiwe University, Awka.
- Brain, K.W. & Stacey, S. (2010). Using information technology: A practical introduction to computers and communication (8th Ed.), New York:McGraw-H ill.
- Cassidy, S. (2013).Developing employability skills: peer assessment in higher education. Directorate of Psychology, University of Salford, Salford, UK. Retrieved from:https://www.emeraldinsight.com/
- Federal Republic of Nigeria (2013).National Policy on Education (6th Ed.). Lagos: NERDC Press.
- Jackson, D. (2013). Student perceptions of the importance of employability skill provision in business undergraduate programs. *Edith Cowan University Research Online*, *3*, 1-21.
- Jafari, M. M., Ahmed, S., Dawal, S. Z. M. & Zayandehroodi, H. (2010). The effects of electronic collaboration in reducing production time: Product design process in SMES. Proceedings of the International Multi-Conference of Engineers and Computer Scientists. Hong Kong.
- Nwazor, J. C. & Onokpaunu, M. O. (2016). Strategies considered effective for transforming business education programmes to the needs of 21st century workplace in Delta State, Nigeria. *African Journal of Education and Practice*, 1(2), 74-82.
- Odunaike, K. O. & Amoda, M. B. (2013)Examination of the Relevance of Business Education in the Development of Entrepreneurship in Nigerian Universities. A Case Study of Tai Solarin University of Education, *International Journal of Humanities and Social Science*, 3(12), 124-127.
- Okoro, J. (2012). Assessment of competencies possessed by university postgraduate business education students to handle entrepreneurship business challenges in Nigeria.(Unpublished M. Sc. Thesis), Nnamdi Azikiwe University.
- Olayanju, T. K. & Asogwa, A. N. (2010). Competency-improvement needs of secretaries of higher institutions in ICT for effective office work performance. *Multidisciplinary Journal of Research Development*, 15(3), 1-9.

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Office Competencesies Required of Business Education Graduations

- Onasanya, S. A., Shehu, R. A., Ogunlade, O. O. & Adefuye, A. L. (2011). Teacher's awareness and extent of utilisation of information and communication technologies for effective Science and Health Education in Nigeria. *Singapore J. Sci. Res.*, 1(1), 49-58.
- Onojeta, S. (2012). Challenges in implementing business education programme through ICT. *ABEN Book of Reading*, 2(1), 156-162.
- Onoyovwi, D. A. (2009).Office work skills required of NCE office Education graduates in a modern office as Perceived by employers in selected Organizations in Delta State. (Published masters degree thesis), Department of Vocational Teacher Education (Business Education), University of Nigeria, Nsukka.
- Roy, S. R. (2012). Virtual collaboration: The skills needed to collaborate in a virtual environment. *Journal of Internet Social Networking & Virtual Communities*, 2(8), 20-31.
- Vincent, L. (2008). Morphological transformations of binary images with arbitrary structuring elements. *Signal Processing*, 22(1), 3-23.
- Wallar, L. E. & Papadopoulos, A. (2015). Collaboration, competencies and the classroom: a public health approach. *The Canadian Journal for the Scholarship of Teaching and Learning*, 6(1), 1-18. DOI: http://dx.doi.org/10.5206/cjsotl-rcacea.2015.1.6

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ENTREPRENEURS' RATING OF TECHNICAL COMPETENCIES REQUIRED OF BUSINESS EDUCATION GRADUATES FOR ESTABLISHING SMALL AND MEDIUM SCALE ENTERPRISES IN ANAMBRA STATE

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Abstract

The need to improve employment opportunities and self-reliant necessitated this study to ascertain entrepreneurs' rating of technical competencies required of business education graduates for establishing small and medium scale enterprises in Anambra State. One research question guided the study and two null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was employed. The population consisted 811 small and medium scale entrepreneurs in Anambra State. A total of 243 of these entrepreneurs were sampled using the proportionate stratified sampling technique. The instrument for data collection was a structured questionnaire titled "Technical Competencies for Establishing Small and Medium Scale Enterprises Questionnaire (TCESMSEQ)" with 10 items. The instrument was validated by three experts. The reliability coefficient was 0.79 and was obtained using Crombach alpha method. Out of a total of 243 copies of the questionnaire distributed, 232 copies were retrieved which represented 95 percent retrieval. The data collected were analyzed using mean and standard deviation in answering the research questions and to check the respondent responses to the mean. The z-test and ANOVA were used for testing the null hypotheses at 0.05 level of significance. The findings revealed that technical competencies were considered required of business education graduates for establishing small and medium scale enterprises. The findings also revealed that gender had no significant influence on SMEs operators' consideration of the technical competencies required of business education graduates for establishing small and medium scale enterprises. Based on the findings of this study, it was concluded that SMEs entrepreneurs in Anambra State were of the opinion that Business Education graduates required technical, competencies for the establishment of small and medium scale enterprises. The study recommended among others that the administrators of business education programmes should partner with entrepreneurs to organize training programmes that will help equip business education students with the requisite technical competencies.

Key words: Entrepreneur, technical competencies, business education graduates and small and medium scale enterprises

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Introduction

In Nigeria, unemployment and poverty among youths are on the rise. For instance, Onyebu (2014) found that the number of Nigerian youths not employed were over 50 percent. Onyebu further noted that over the years, the federal government has initiated various programmes aimed at eradicating unemployment and poverty especially among the teeming youths. Unfortunately, the poverty eradication programmes of the Federal Government have not yielded tangible results as Nigeria still ranks among the 25 poorest nations in the world despite its huge resources both material and human (Oba, 2012). Though Nigeria is the most populated black nation in Africa and eight in the world with a population of over 170 million people, the country has a nominal Growth Domestic Product of £207.11 billion (Ezeani, 2014). The Human Development Index in 2008 ranked Nigeria as 148th out of 173 poorest nations. The situation confirmed the observation by Segun (2010) that poverty in Nigeria has reached an alarming stage as more than 45 percent of the Nigeria population live below poverty line and 67 percent of the poor are extremely poor.

Similarly, collapse and dearth of many small and medium scale enterprises have been on the rise. It is on this basis that Ezeh (2011) reported that every year in Nigeria, a number of small and medium scale enterprises spring up but many eventually collapse within a short time frame. This according to Ezeh is attributable to lack of adequate entrepreneurial competencies among the operators of small and medium scale enterprises. There is no doubt that the acquisition of requisite entrepreneurial competencies would enable both prospective and practicing entrepreneurs to be able to surmount all the challenges emanating from the ever dynamic business environment.

The present economic reality in the country shows that the situation has not improved in any way. Nwanewezi (2010) noted the high rate of unemployment in the country as attributed to lack of employment opportunities, as well is the unemployable nature of Nigerian graduates. It seems that Nigerian graduates are not exposed to qualitative education that would empower them through entrepreneurship towards becoming self-reliant.

In relation to eradicating poverty, Oba (2012) asserted that the place of youth education and entrepreneurial programmes that would genuinely address and encourage youths to be involved in entrepreneurial practices are what the nation need at this time. Thus, the only way to empower the youth is to provide them with adequate and qualitative education in order to make them self-employed, job creators and to eradicate poverty in their various communities. Many countries of the world including Nigeria among others have considered business education as relevant in equipping young people with necessary skills and competencies that would enable them engage in skill acquisition and productive livelihoods (Ezeani, 2014).

Aliyu (2006) defined business education as the intellectual and vocational preparation of people for earning a living in a contemporary business world. Udoh (2010) conceived business education as a means by which an individual develops understanding and skills which enable the individual to enter into the business world and be self-reliant. It has very definite vocational objectives such as the provision of training for specific type of jobs to develop and use these skills. In line with the above view, Adeshina (2007) opined that business education is a training that encourages the beneficiary to acquire skills necessary to fit into the world of work. Business education is desirable for equipping graduates with competencies necessary for self-employment which is particularly important in the present depressed global economic situation by equipping individuals with life-long skills for employment (Udoh, 2010).

Business education aims at providing training for specific type of jobs, developing the ability to use skills in the environment of business and helping learners become intelligent consumers of goods and services. It is expected that business education students upon graduation can establish their own small and medium scale enterprises instead of searching for white collar jobs which are not readily available. The establishment of these small and medium scale enterprises would indeed help to salvage the country from the shackles of poverty and unemployment.

Small and medium scale enterprises (SMEs) are enterprises with a minimum asset base between N1,000,000.00 and N2,000,000.00, excluding land and working capital, with the number of staff employed by the enterprise not less than five and not more than 300 (Olabiyi, Akanni & Ajibade, 2014). One of the common features of SMEs is that they are either sole proprietorship or partnership and have centralized management structure (Udechukwu, 2011).

Furthermore, the level of industrial development expected to be generated through development of SMEs compared to the need of the country has never been achieved. Salami (2003) observed that there has been high mortality rate of SMEs in the country due to lack of entrepreneurial skills and competencies required by small and medium scale entrepreneurs. According to Salami, inadequate entrepreneurial skills and competencies have resulted into reluctance of banks to extend credit facilities to SMEs entrepreneurs. In the same vein, most vocational centre trainees expected to acquire skills for self-reliance and join the pool of entrepreneurs for industrial development of Nigeria do not have acquired entrepreneurial skills and competencies (Segun, 2010).

In view of the objectives of business education programme at the university education level, the graduates of this programme who are expected to venture into SMEs require adequate entrepreneurial competencies so as to be able to run these businesses successfully. It is in line with this that entrepreneurship education was integrated into the curriculum of tertiary institutions in Nigeria (Ezeani, 2014). However, to equip business education graduates to successfully operate these SMEs, certain entrepreneurial competencies are essential. By virtue of this competency, the

graduates will be completely equipped to surmount challenges arising from either the internal or external business environment.

Olaitan (2003) stated that to be competent means that the individual has acquired the knowledge, skills and attitudes in order to perform successfully at a specified proficiency level in a given work. Man, Lau and Chan (2006) viewed competency as the capacity to perform a task or tasks skilfully and effectively. Entrepreneurial competencies as applied to this study simply refer to the sum total of all attributes, skills and abilities required for successful operation of small and medium scale business enterprises (Ezeh, 2011).

It, therefore, follows that if business education graduates are trained in the entrepreneurship sector, they can become competent entrepreneurs. However, there are various entrepreneurial competencies that business education graduates require for successful establishment of small and medium scale enterprises. For the purpose of this study, emphasis would be placed on one major entrepreneurial competencies identified by Ezeh (2011). They include technical competencies.

Technical competencies refer to job specific knowledge and techniques required to perform organizational role. It refers to the abilities and experiences that allow an individual to perform a task successfully. Technical competencies involve the proficiency or ability to use knowledge, equipment, materials and other non-human resources in performing activities necessary to help accomplish some set goals (Ogunleye, 2011). Udechukwu (2011) revealed that learners required new knowledge, skills and technical competencies for effective operation in their various disciplines upon graduation.

The influencing factors in the content of technical competencies for SMEs required by business education graduates could be the gender and type of enterprises. Ismail, Soladoye, Bernice, Oloyede and Olawale (2012) who found that entrepreneurial skills needed for successful small business operation are independent of gender. The type of enterprises in this study refers to the nature of productive activity engaged in by an entrepreneur. Three types of entrepreneurial enterprises abound for entrepreneurs (service, merchandise and production) with their varied competencies. Service industries refer to those industries that specialize in rendering services to customers rather than producing physical commodities. These include schools, law firms, restaurants and bars, hotels, laundry firms and so on. Merchandise industries referred to those industries that focus mainly on the sale of products to the final consumers. They often involve in wholesale distribution. They include firms that engage in exportation and importation, supermarkets, chain store businesses and so on. Production industries refer to those industries that specialize in the manufacture of physical commodities. Okeke, Ezenwafor and Famiwole (2014) found that the technical competencies required for successful establishment of small and medium scale enterprises varied based on the type of activities engaged in by the entrepreneurs.

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It, therefore, follows that if business education students are trained in line with entrepreneurial competencies, they can become successful entrepreneurs and contribute in the fight against poverty and unemployment. Considering that the success or failure of business education graduates in Anambra State to successfully venture into various small and medium scale business ventures upon graduation depend to a large extent on their acquisition of requisite entrepreneurial competencies; it is essential to determine the ratings of technical competencies by the entrepreneurs required of these graduates to ensure their successful livelihood in the society.

Statement of the Problem

The educational system of any nation has a vital role to play in shaping the economic realities of the society. Tertiary education graduates, especially those from the universities as stated in the National Policy on Education are expected to secure employment and set up their own businesses and become self-employed and be able to create jobs for others (Federal Republic of Nigeria, 2013). However, it seems that these goals are yet to be actualized as some scholars still point at lack of practical skills and entrepreneurial competencies that will enable business education graduates to be self-employed.

The high rate of unemployment among university graduates has been attributed to lack of skills and competencies required in the world of work. Thus, Oyebu (2014) agreed that one of the main causes of unemployment among university graduates is lack of employable skills. Many unemployed youths seem not to possess the necessary skills which the modern economy demands and one faced with the burdens of surplus unemployable manpower (Segun, 2010). Furthermore, the present economic realities and technological innovations seem to be making business education graduates unemployable or ill-fitted for the demands of the job market due to lack of technical skills and competencies.

In this regard, the high rate of unemployment and its attendant consequences among business education graduates especially from the universities can only be stemmed if they acquire adequate technical competencies that will enable them become self-reliant. This study focuses on determining the entrepreneurs' ratings of technical competencies required of business education graduates for establishing small and medium scale enterprises.

Purpose of the Study

The major purpose of this study was to determine the entrepreneurs' rating of technical competencies required of business education graduates for establishing small and medium scale enterprises in Anambra State. Specifically, the study sought to determine the extent to which:

1. technical competencies are required of business education graduates for establishing small and medium scale enterprises in Anambra State.

Research Questions

The following research question guided the study:

1. To what extent do business education graduates require technical competencies for establishing small and medium scale enterprises in Anambra State?

Hypotheses

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

- 1. Male and female SMEs operators do not differ significantly in their mean ratings on technical competencies required of business education graduates for establishing small and medium scale enterprises in Anambra State.
- 2. Entrepreneurs of small and medium scale enterprises do not differ significantly in their mean ratings on technical competencies required of business education graduates for establishing small and medium scale enterprises based on type of enterprise (service, merchandise and production).

Method

Descriptive survey design was adopted for the study. This research design according to Nworgu (2015), is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. This design was considered appropriate for this study since the study sought to explore the opinions of the respondents on the entrepreneurial competencies required by business education graduates for establishing small and medium scale enterprises. The population for the study consisted of 811 entrepreneurs of small and medium scale enterprises registered with the Anambra State Ministry of Trade, Commerce and Industry. The sample of this study comprised 243 entrepreneurs were sampled using the proportionate stratified sampling techniquethrough randomization from each stratum. Instrument for data collection was 10-items structured questionnaire titled "Technical Competencies for Establishment of Small and Medium Scale Enterprises Questionnaire (TCESMSEQ)." The instrument was validated by three experts; two in business education and one expert in measurement and evaluation all from the Faculty of Education, Nnamdi Azikiwe University, Awka. Their comments enhanced the face and content validity of the instrument.

To ascertain the validity of the instrument, the researchers conducted a pilot test whereby copies of the instrument were administered to 20 selected small and medium scale entrepreneurs from Asaba, Delta State which is outside the study area but have similar characteristics to the studied area. The data were analyzed using Cronbach alpha method to determine its degree of reliability and obtained 0.79 using Statistical Package for Social Sciences (SPSS). The administration of the instrument was carried out personally by the researchers with the aid of three research assistants.

Data collected regarding the research question were analyzed using mean and standard deviation. The z-test and Analysis of Variance (ANOVA) statistic was used to test the null hypothesis. A decision rule was based on a mean rating between 4.50-5.00 were regarded as very high extent, an item with mean rating of 3.50-4.49 were considered as high extent and an item with 2.50-3.49 were regarded as moderate extent. Furthermore, items with mean rating of 1.50-2.49 and 0.50-1.49 to low extent and very low extent respectively. In testing the null 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 business education graduates require technical competencies for establishing small and medium scale enterprises in Anambra State?

To answer this question, the following computation which is shown in Table 1 was done.

Table 1

Mean ratings of entrepreneurs of small and medium scale enterprises on technical competencies required of business education graduates in Anambra State. N= 232

S/N	Technical Competencies	Mean	SD	Decision
1	understand the nature of business	4.11	.57	High Extent
2	describe the types of equipment			
	needed for the business	4.20	.40	High Extent
3	determine appropriate location for			
	the business	4.50	.50	Very High
				Extent
4	ascertain the sources of raw	4.19	.60	High Extent
	materials			C
5	ascertain the availability of raw	3.90	.54	High Extent
-	materials			8
6	determine the number of personnel			
0	needed for the business	4.09	54	High Extent
_				e
7	identify technical problems	4.60	.49	Very High
	71			

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	Cluster Mean	4.26		High Extent
	line			
	competence in a specific business	4.29	.64	High Extent
10	acquire in-depth technical			
	performance			
9	evaluate business operational	4.30	.78	High Extent
8	solve technical problems	4.40	.49	High Extent
0		4.40	10	Extent

The data in Table 1 shows that the cluster mean is 4.26 which indicate that business education graduates in Anambra State require technical competencies to a high extent. The item by item analysis shows that items 1, 2, 4, 5, 6, 8, 9 and 10 reveal that business education graduates require the listed technical competencies to a high extent with mean ratings ranging from 3.90 to 4.40 which are all above the limit of 2.50-3.49. Items 3 and 7 with the mean ratings 4.50 and 4.60 respectively showed that business education graduates require technical competencies for the establishment of small and medium scale enterprises to a very high extent. The standard deviations show that there is homogeneity amongst responses indicating a greater consensus of opinions. This is indicated by their standard deviation values which range from 0.40-0.64.

Test of Hypotheses Hypothesis 1

Male and female SMEs operators do not differ significantly in their mean ratings on technical competencies required of business education graduates for establishing small and medium scale enterprises in Anambra State.

This null hypothesis was tested using z-test at 0.05 level of significance and the results are presented in Table 2.

Table 2

Summary of z-test comparison of the mean ratings of male and female operators of small and medium scale enterprises on technical competencies required of business education graduates in Anambra State.

Gender	Ν	\overline{X}	SD	α	df	t-	P-value	Decision
						value		

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							А.	E. Onyesom & M. Onyesom			
Male	148	4.21	.16	0.05	230	6.33	0.96	Not Significant			
Female	84	4.35	.14								

The results in Table 2 shows that male and female SMEs operators do not differ significantly in their mean ratings on technical competencies required of business education graduates for establishing small and medium scale enterprises in Anambra State. This was shown by the z-cal value of 6.33 and the P-value (.96) which was greater than the stipulated 0.05 level of significance. The null hypothesis of no significant difference between the two groups is therefore not rejected.

Hypothesis 2

Entrepreneurs of SMEs do not differ significantly in their mean ratings on technical competencies required of business education graduates for establishing small and medium scale enterprises based on type of enterprise (service, merchandise and production).

This null hypothesis was tested using ANOVA statistic at 0.05 level of significance and the results are presented in Table 3.

Table 3: Summary of Analysis of variance on mean ratings of entrepreneurs of small and medium scale enterprises on technical competencies required of business education graduates in Anambra State based on type of enterprise.

Sum	Sum of Squares		Mean Square F	P-va	lue
Between Groups	1.526	2	.763		
				34.57	.000
Within Groups5.055	229	.022			
Total	6.581	231			

As shown in Table 3 there was a significant difference among the three groups (service, merchandise and production) in terms of their mean ratings on technical competencies required of business education graduates for establishing small and medium scale enterprises. This is indicated by the F-ratio of 34.57 at (2, 229) and Pvalue (.00) which was less than the stipulated 0.05 level of significance. Therefore the null hypothesis was rejected.

Date relating to the above hypothesis is presented in Table 4.

Table 4: Scheffe post hoc test on mean ratings of entrepreneurs of small and medium scale enterprises on technical competencies required of business education graduates in Anambra State.

(I) (J)	Mean	P-value	Signi.	Decision
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type_of_industry	type_of_industry	Difference (I-J)		
Service	Merchandise	.08455*	.002	
	Production	11684*	.000	
Merchandise	Service	08455*	.002	
	Production	20139 [*]	.000	
Production	Service	.11684*	.000	
	Merchandise	.20139*	.000	

Discussion of Findings

The findings on technical competencies indicated that SMEs entrepreneurs agreed that business education students required technical competencies for establishing small and medium scale enterprises. These technical competencies included ability to understand the nature of business, ability to determine appropriate location for the business, ability to describe the types of equipment needed for the business among others. This finding is in line with Ogunleye (2011) who found out that business education graduates require adequate technical competencies so as to handle specialized areas of business operations. This finding is in agreement with that of Udechukwu (2011) whose study revealed that learners required new knowledge, skills and technical competencies for effective operation in their various disciplines upon graduation. The findings is in support by Segun, (2010) who identified technical competencies as one of the important competencies required for establishment of small and medium scale enterprises. In line with the authors, the graduates of business education require technical competencies so as to be able to successfully establish and manage various small and medium scale enterprises.

The findings also revealed that there was a significant difference in the mean responses of SMEs operators in Anambra State on technical competencies required of business education students for establishment of small and medium scale enterprises on the basis of gender. This finding is in line with Ismail, Soladoye, Bernice, Oloyede and Olawale (2012) who found that entrepreneurial skills needed for successful small business operation is independent of gender. The findings also revealed that the type of enterprise of the entrepreneurs affected their ratings of technical competencies required of business education graduates for establishment of small and medium scale enterprises.

Conclusion

Based on the findings of this study, it is concluded that SMEs operators in Anambra State are of the opinion that business education students required technical competencies for the establishment of small and medium scale enterprises. It is also concluded that gender did not significantly affect the opinion of SMEs operators on the technical competencies required of business education graduates for the establishment of small and medium scale enterprises in Anambra State, Also, type of

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enterprise significantly affect the opinions of entrepreneurs of small and medium scale enterprises on the technical, competencies required of business education graduates in Anambra State.

Recommendations

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

- 1. The government and administrators of business education programmes should partner with small and medium scale entrepreneurs to organize training programmes that will help equip business education graduates with requisite entrepreneurial competencies. This can be done through the organization of conferences, seminars and workshops.
- 2. Business education lecturers should be sent for compulsory conference that always hold once in years to by their association to acquaint them with current trends in the job market.
- 3. Government should make available adequate funds for business education departments in colleges of education and universities to enable them acquire necessary equipment that would aid the acquisition of necessary entrepreneurial competencies during the course of their programmes.

References

- Adeshina, A. (2007). Sustainable entrepreneurship development and the problem of business ethical practices in Nigeria. *International Journal of Business and Social Science*, 6(1), 1-5.
- Akhuemonkhan, L. A., Raimi, A. S., & Sofoluwe, A. (2013).Entrepreneurship education and employment Stimulation in Nigeria. Afro Asian Journal of Social Science, 4(4), 45-53.
- Aliyu, M. M. (2006). *Business education in Nigeria: Trends and issues*. Ilorin: Ghosen Print Media.
- Ezeani, N. S. (2014). The teacher and skills acquisition at business education: From the perspective of accounting skills. *Arabian Journal of Business and Management Review*, 2(4), 1-12.
- Ezeh, P. C. (2011). Critical entrepreneurial skills required by graduate secretaries of polytechnics. *Business Education Journal*, 8(1), 141-154.
- Federal Republic of Nigeria (2013). *National policy on education (6th Ed.)*. Lagos: NERDC Press.

NAU Journal of Technology & Vocational Education Vol.3 No.1 2018. All Rights Reserved. http://www.naujtved.com.ng

- Ismaili, O. M., Soladoye, N. L., Bernice, O. L., Oloyede, S. A., & Olawale, A. O. (2012). Gender differences in entrepreneurial skills' acquisition: An analysis of informal institutional factors. *Journal of Business and Management (IOSRJBM)*, 2(6), 14-25. Retrieved fromwww.iosrjournals.org
- Man, T., Lau, T., & Chan, K. F. (2006). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal* of Business Venturing, 17(3),123-14.
- Nworgu, B. G. (2015). *Educational research: Basic issues and methodology*. Ibadan: Wisdom Publishers.
- Nwanewezi, M. C. (2010). Problems in business education research in ICT era as perceived by business educators. *Business Education Journal*, 7(2), 46-54.
- Oba, A. (2012). Sustainable entrepreneurship development and the problem of business ethical practices in Nigeria. *International Journal of Business and Social Science*, 6(1), 1-5.
- Ogunleye, I. O. (2011). Entrepreneurial plans of business education students in Kano State. *Business Education Journal*, 8(1), 65-78.
- Okeke, A. U., Ezenwafor, J. I., & Famiwole, R. O. (2014). Entrepreneurs reported challenges and opportunities of global financial crisis on small scale business in Anambra and Ekiti States, Nigeria. Asian Academic Research *Journal of Social Science and Humanities*, 1(19), 278-289. Retrieved from www.asianacademicrearch.org
- Olabiyi, A. B., Akanni, N. O., & Ajibade, C.G. (2014). An evaluation of the challenges and prospects of micro and small scale enterprises development in Nigeria. *American International Journal of Contemporary Research*, 2(4), 162-174.
- Olaitan, S.O. (2003). *Understanding curriculum*.Nsukka: Ndudim Printing and Publishing Copy.
- Onyebu, C. M. (2014). The role of entrepreneurial skills in academic performance: a case study of selected universities in Abia state, Nigeria. *Review of Public Administration and Management*, 4(8), 17-26. Retrieved from www.arabianjbmr.com/RPAM_index.php
- Salami, A. T. (2003). Financing small and medium scale industries in Nigeria. A paper presented at a day conference survival and development of small and medium scale industry sector in Nigeria, Abuja.
- Segun, F. A. (2010). *Basic small business entrepreneurship: A modern approach*. Agbor: Royal Pace Publication.
- Udechukwu, F. N. (2011). Survey of small and medium scale industries and their potentials in Nigeria. Central Bank of Nigeria seminar on Small and Medium scale Industry Equity Investment Scheme (SMIEIS). CBN training Centre Lagos No.4.
- Udoh A.A. (2010).Business education as a tool for economic empowerment and investment opportunities. *Journal of Business Educational Research and Development* (*JOBERD*), 1(1), 21-32.

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SUPERVISORS' RATINGS OF COMPUTER SKILLS POSSESSED BY SECRETARIES FOR EFFECTIVE WORK PERFORMANCE IN COLLEGES OF EDUCATION IN DELTA STATE

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Abstract

The study was undertaken to determine supervisors' ratings of the extent computer skills are possessed by secretaries for effective work performance in colleges of education in Delta State. The study adopted the survey research design and was guided by four research questions while four null hypotheses were tested at 0.05 level of significance. The entire population of 132 supervisors (deans, heads of departments and directors of programmmes) in the four colleges of education in Delta State was used for the study. A 40 item structured questionnaire with five response options was used for data collection. The questionnaire was validated by three experts and its reliability co-efficient of 0.86 was calculated using Pearson Product Moment Correlation. Data relating to the research questions were analyzed using mean and standard deviation while analysis of variance (ANOVA) was used to test the four null hypotheses. The study found that secretaries in colleges of education in Delta State possessed word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills at a moderate extent. Respondents' mean ratings were not significantly influenced by their qualifications and designations. Based on the findings, it was concluded that the moderate possession of computer skills by secretaries in colleges of education in Delta State may be affecting their effective performances in the present technology driven era. It was recommended among others that authorities of colleges of education in Delta State should regularly organize retraining programmes for secretaries on the usage of computer and its applications.

Keywords: Internet, Secretaries, Skills, Spreadsheet, Power-Point, Word-Processing

Introduction

The introduction of information and communication technology which is largely symbolized by computer has altered the system of office information generation, acquisition, processing, storage and dissemination. As a result, the business environment all over the world has witnessed tremendous changes in its traditional methods and practices. Office secretaries fall among office personnel who have come face-to-face with the challenges of this information and communication and technology because they handle numerous office functions related to information processing.

A secretary is a member of staff who is concerned with the preparation, preservation and transmission of different types of office documents as well as conventional secretarial duties of confidential nature at various levels in an organization. The brochure of European Association of Professional Secretaries cited in Enyekit (2006) defined a secretary as one who has sufficient knowledge of his boss's activities and the type of work to do to be able to have considerable amount of work delegated to him or her. This implies that a qualified secretary should possess basic secretarial skills, have sufficient business acumen, be versatile in office information and communication technology and have sufficient knowledge of the operations of all departments within the organization where he or she works.

The secretary is always referred to as the 'hub' on which other activities of the office revolve. This is because the secretary's duties do not end with mere keeping and retrieving of valuable office documents but include other functions necessary for the smooth running of the office. This point is buttressed by Ejeka (2004) who defined a secretary as an executive assistant who possess a mastery of office skills and abilities to assume responsibilities without direct supervision. Ejeka maintained that a secretary displays initiative, exercises judgment and takes decisions within the scope of his authority. This applies in situations where a secretary is required to assume responsibilities, make decisions and work independently. In the same vein Adozoga and Massnawa (2003) posited that a secretary is an important officer in any establishment whose contribution and effectiveness will either enhance or diminish the efficiency of an organization.

In the context of traditional office system, a secretary was responsible for performing the routine jobs of typing various office documents such as letters, memos, reports and manuscripts, taking notes in shorthand and translating same with typewriter. Most of the methods of executing these traditional roles are now seen as rather crude since they could only make little contribution to efficient work performance in the modern technology driven offices. Information and communication technology has brought about new ways of conducting business in the form of electronic commerce, electronic banking, electronic mail among others. Secretaries in most cases do not seem to depend any longer on the traditional methods of collecting, sorting, processing and dissemination of information, rather the

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computer and other complementary gadgets are now being used to perform these functions. The implication is that modern office activities have gone beyond typewriting and note taking at high speed and transcribing same, it is therefore expected of secretaries to possess relevant skills and competencies to use the computer and other gadgets for effective work performance in the computerized business offices. These computer skills may include word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills among others.

Word processing skills cover the ability to use a word processor such as 'Microsoft Word' to process textual materials and documents such as letters, memos, reports, minutes and so on. Word processing skills are required in almost every office job. A word processing application can be used in a computer to create, save, edit, format and print all kinds of documents. Electronic spreadsheet is another aspect of computer application skills which secretaries need in modern business offices. With spreadsheet application such as MS Excel, information is easily displayed and formulas can be inserted to manipulate data. Information can also be sorted and filtered on the spreadsheet application. Such information is usually useful for decision making.

Apart from the spreadsheet application, another crucial modern technology is the internet. The use of internet application skill to carryout online office activities seem to be dominant in modern business offices especially among secretaries who are at the centre of day-to-day administration of business organizations. The introduction of internet in office administration has recorded remarkable improvement in business performance. In addition to the explosion in online business opportunities and breakthroughs, secretaries communicate with bosses, workers and colleagues through e-mail and other online chats/applications. Mbaezue (2010) posited that e-mail is a widely used internet application that enables individuals or group of individuals to quickly exchange messages even if they are separated by long distance. Power-point presentation is another computer application system which enables users to create powerful presentation to their audience. Power-point is mainly used during seminars, workshops, conferences as well as other staff training and development programmes. It allows the user to include formatted text, graphics, pictures, sounds, videos and animations in the presentation. Ndukwe (2005) noted that presentation created with power-point can add audio and visual effects, making them look professional or flashy to meet high standard presentation.

Secretaries are expected to possess computer skills for effective work performance in their organizations as a result of the emerging technologies. The extent to which secretaries in colleges of education possess these computer skills will determine their level of effectiveness and efficiency in responding to the needs of the present computerized offices. However, the trend in office system applications is that different organizations appear to lay emphasis on specific areas relevant to them but all the aforementioned computer applications are very relevant to duties of secretaries

in colleges of education. This necessitated the study to ascertain the assessment of supervisors in colleges of education in Delta State on the extent their secretaries possess skills in computer applications for effective work performance.

For the purpose of this study, supervisors are management staff in the colleges of education who assign responsibilities to secretaries working under them. They include the Heads of department/units, Deans of schools and Directors of both academic and non-academic programmes, Bursars, College Librarians, Registrars and Provosts. These management staff supervise secretaries directly and regularly in their official assignments. The close work relationship between these supervisors and their secretaries enable them to understand the areas of strengths and weaknesses of their secretaries. As a result, they have both the knowledge and experience required to rate their secretaries' possession of computer skills. A number of variables that could influence supervisors' ratings of their secretaries' possession of computer skills include educational qualifications of the supervisors as well as the position or designations which they occupy in the organisation. It is expected that the highly qualified or experienced secretaries perform secretarial duties for top-level executives and for those with higher educational qualifications. So, the ratings by these top-level supervisors and those with higher educational qualifications may differ with their counterparts because their secretaries are likely more qualified and experienced. Therefore, the effect of supervisors' designation and educational qualification on their responses was also investigated in the study.

Statement of the Problem

The introduction of sophisticated technological equipment and applications has significantly altered the secretary's method and process of work performance. According to Oduma (2006), the technological trends in modern office had not only caused some jobs to disappear in direct correlation with the amount of training in such jobs, but the emergence of previously unknown office equipments and applications. A good number of practicing secretaries in public offices (including educational institutions) were trained when major emphasis was on typewriting and shorthand. Thus, they need to acquire and possess relevant computer skills for effective work performance in order to contribute positively to the growth and development of their modern organizations.

The problem of this study therefore, is that the extent secretaries in colleges of education in Delta State possess relevant computer skills for effective work performance is not clearly known. An empirical study is required to guide stakeholders on objective measures of extent of computer skills possessed by secretaries and to ensure that professionals meet the need of the present technology era. Hence, this study on supervisors' ratings of computer skills possessed by secretaries in colleges of education in Delta State was undertaken.

Purpose of the Study

The study was conducted to determine supervisors' ratings of computer skills possessed by secretaries for effective work performance in colleges of education in Delta State. Specifically, the study ascertained the ratings of supervisors in colleges of education in Delta State on the extent their secretaries possess word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills.

Research Questions

The following research questions were posed to guide the study.

- 1. What is the extent of word-processing skills possessed by secretaries in colleges of education in Delta State?
- 2. What is the extent of electronic spreadsheet skills possessed by secretaries in colleges of education in Delta State?
- 3. What is the extent of internet application skills possessed by secretaries in colleges of education in Delta State?
- 4. What is the extent of power-point presentation skills possessed by secretaries in colleges of education in Delta State?

Hypotheses

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

- 1. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess word processing skills based on designation.
- 2. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess electronic spreadsheet skills based on designation.
- 3. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess internet application skills based on educational qualifications.
- 4. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess power-point presentation skills based on educational qualifications.

Method

The study adopted the descriptive survey design and was conducted in the four colleges of education in Delta State. They were College of Education, Agbor; College of Education, Warri; College of Education, Mosogar and Federal College of Education (Technical), Asaba. The population of the study comprised all the 132 Supervisors (Deans, Directors and HODs) of academic and non-academic units in the four colleges of education who have secretaries working under them. The entire population was used for the study without sampling because it was not too large. Questionnaire was used to gather data for the study. The questionnaire consisted of

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two parts. Part I contained two items on respondents' personal data such as designation and educational qualification while Part II has four sub-sections (A, B,C and D) containing a total of 40 items 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 questionnaire was validated by three experts (one instrument expert and two content experts) in terms of clarity of language, items relatedness to purpose of the study and content coverage. Their inputs were considered in preparing the final draft of the questionnaire. The reliability of the questionnaire was established through test re-test using 10 supervisors (five from College of Education, Ekiadolor and five from College of Education, Igueben, both in Edo State). The data generated thereof were subjected to Pearson Product Moment correlation analysis which yielded a coefficient index of 0.86. This coefficient value is indicative of high reliability.

The questionnaire was administered to the respondents by the researchers and three assistants who were briefed on instrument administration and retrieval. The entire 132 copies of the questionnaire distributed were successfully collected and used for data analysis. The data collected were analysed using mean and standard deviation to answer the research questions while Analysis of Variance (ANOVA) was used to test the null hypotheses at 0.05 level of significance. Decision on the research questions was based on the boundary limits of five point rating scale while null hypothesis was upheld where the value of F-calculated was less than the value of Fcritical and rejected where the value of F-calculated was greater than or equal to the value of F-critical.Results

The results and interpretations are presented in the following tables according to the research questions and hypotheses.

Т	al	hI	•	1
1	a	U	e	T

Skill	s			
S/N	Word Processing Skilss	π	SD	Remarks
1	Ability to load a word processing application			VGE

Respondents	Mean Ra	atings on	the Extent	Secretaries	Possess	Word I	Processing
Skills							

S/N	Word Processing Skilss	π	SD	Remarks
1	Ability to load a word processing application			VGE
	software e.g MS Word	4.77	0.74	
2	Creating and organizing computer files and			GE
	folders	3.77	0.81	
3	Ability to use storage devices(hard disk,			GE
	diskette, CD, flash etc) for storing and sharing			
	files	3.64	1.15	
4	Use input devices to enter and edit text	3.05	1.39	GE
5	Copy, cut and paste text	3.58	1.55	GE
6	Insert pictures and symbols into a document with	2.09	0.80	

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3.31

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ME

7 8	correct margin and layout Change text font style and size in a document Create and format table in a document	4.41 1.38	1.14 0.73	SE GE VSE
9	Use Word Art to create and shape text in a document	2.36	1.19	SE
10	Preview, print and save text in a word processing	4.01	1.32	GE

Table 1 shows that the supervisors rated items 1 and 8 as very great extent and very small extent respectively, while items 6 and 9 were rated by the supervisors as small extent. The other items (2, 3, 4, 5, 7 and 10) were adjudged by the supervisors to be great extent. The close range of standard deviation of the responses further shows that supervisors were not far in their ratings. However, the grand mean of 3.31 which falls within the range of 2.50-3.49 indicates that secretaries in colleges of education in Delta State posses word processing skills to a moderate extent.

Table 2

Grand Mean

Respondents' Mean Ratings on the Extent Secretaries' Possess Electronic Spreadsheet Skills

S/	Electronic Spreadsheet Skills	π	SD	Remarks
Ν	_			
11	Opening a spreadsheet application software	4.64	0.78	VGE
12	Ability to adjust column's width and row's height	3.33	1.10	ME
13	Entering and sorting data in worksheet	2.11	1.26	SE
14	Ability to create formula to carryout arithmetic computation in a worksheet	1.36	0.72	VSE
15	Naming/renaming a worksheet	4.36	1.00	GE
16	Merging and centering data in a worksheet	2.00	0.62	SE
17	Inserting borders, columns and rows	2.02	0.68	SE
18	Deleting columns and rows	2.64	1.30	ME
19	Ability to create editing and formatting			SE
	charts and graph using spreadsheet application	2.14	1.23	
20	Previewing, printing and saving a worksheet	4.64	0.93	VGE

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Grand Mean	2.92	ME
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As presented in Table 2, the supervisors rated items 11 and 20 as very great extent while item 14 was rated as very small extent. Furthermore, the supervisors rated item 15 as great extent, items 12 and 18 as moderate extent, while items 13, 16, 17 and 19 as small extent. However, the close range of standard deviation of the responses further indicates that the supervisors were homogenous in their ratings. The grand mean (2.92) which falls within the range of 2.50-3.49 implies that electronic spreadsheet skills were rated by supervisors as being moderately possessed by secretaries in colleges of education in Delta State.

Table 3

Respondents' Mean Ratings on the Extent Secretaries Possess Internet Application Skills

S/N	Internet Application Skills	π	SD	Remarks
21	Ability to access internet application software or web browser	4.80	0.40	VGE
22	Creating an e-mail account	3.12	1.14	ME
23	Opening and composing mail online	3.02	1.42	ME
24	Sending and receiving mails with attachment	3.52	1.41	GE
25	Controlling junk e-mail messages	1.75	0.91	SE
26	Ability to communicate with colleagues and clients online	2.11	1.42	SE
27	Ability to use shared devices within a network	1.89	0.60	SE
28	Refreshing and saving a web page	2.20	1.33	SE
29	Downloading information from the internet	3.08	1.23	ME
30	Uploading information into the internet	1.51	0.09	SE
	Grand Mean	3.00		ME

The results shown on Table 3 revealed that the supervisors rated item 21 as very great extent, item 54 as great extent and items 52, 53, 59 as moderate. The other items (25, 26, 27, 28 and 30) were rated by the supervisors to be small extent. The close range of standard deviation of the responses further indicates the closeness of supervisors in their ratings. The grand mean of 3.00 which is within 2.50-3.49 shows

that the secretaries in colleges of education in Delta State possess internet application skills to a moderate extent as rated by their supervisors.

Table 4

Respondents' Mean Ratings on the Extent Secretaries' Possess Power-Point Skills

S/N	Power-Point Presentation Skills	π	SD	RemarkS
31	Opening a Power point work environment	4.93	0.55	VGE
32	Ability to create slides using different layouts	2.35	1.14	SE
33	Adding titles and subtitles to a slide	2.80	1.04	ME
34	Changing font and sizes of text in a slide	2.80	1.46	ME
35	Ability to copy and paste objects and pages	4.25	1.34	GE
36	Inserting images in a presentation	2.18	1.27	SE
37	Adding sounds and animation in a presentation	2.00	0.83	SE
38	Running a slide show in a power point	1.98	0.97	SE
39	Printing out and storing slide presentation	2.25	1.27	SE
40	Ability to make a presentation using slides and			SE
	projectors	2.10	0.67	
	Grand Mean	2.76		ME

The results presented in Table 4 revealed that the supervisors rated item 31 as very great extent and item 25 as great extent, while items 33 and 34 were rated as moderate extent. Items 32, 36, 37, 38, 39 and 40 got mean ratings of small extent. The close range of standard deviation of the responses further shows that the supervisors were not far apart in their ratings. Since the grand mean of 2.76 which is within the range of 2.50 and 3.49, it indicates that the supervisors rated power-point skills as being moderately possessed by secretaries in colleges of education in Delta State.

Table 5

Summary of Analysis of Variance (ANOVA) for Hypothesis One

Source of Variance	Sum of Squares	Df	Mean of Squares	F-cal	F- crit	Decision
Between groups	59.46	2	29.73	2.95	2.99	Not
Within groups	1299.47	129	10.07			Significant
Total	1358.93					

The result on Table 5 shows that the calculated value of F (2.95) is less than the critical value of F (2.99) at 0.05 level of significance. This implies that supervisors did not differ significantly in their mean ratings on the extent of word processing

skills possessed by secretaries for effective work performance in Colleges of Education in Delta State as a result of designation. Therefore, the null hypothesis was upheld.

Table 6 Summary of Analysis of Variance (ANOVA) for Hypothesis One Source of Sum of Df Mean of F- F-crit Decision											
Variance	Squares	DI	Squares	cal	r-crn	Decision					
Between groups	48.68	2	32.28	2.88	2.99	Not					
Within groups	1719.51	129	15.18			Significant					
Total	1768.19										

The result on Table 6 shows that the F-calculated value of 2.88 is less than the critical F-value of 2.99 at 0.05 level of significance. This implies that supervisors did not differ significantly in their mean ratings on the extent of electronic spreadsheet skills possessed by secretaries for effective work performance in Colleges of Education in Delta State as a result of designation. Therefore, the null hypothesis was upheld.

Table 7

Summary of Analysis of Variance (ANOVA) for Hypothesis Three

Source of Variance	Sum of Squares	Df	Mean of Squares	F-cal	F-crit	Decision
Between groups	51.30	2	25.65	2.63	2.99	Not
Within groups	1258.26	129	9.75			Significant
Total	1309.56					

As presented on Table 7, the F-calculated value of 2.63 is less than the Fcritical value of 2.99 at 0.05 level of significance. This means that supervisors did not differ significantly in their mean ratings on the extent of internet application skills possessed by secretaries for effective work performance in Colleges of Education in Delta State based on qualification. Therefore, the hypothesis was upheld.

Table 8													
Summary of Analysis of Variance (ANOVA) for Hypothesis Four													
Source of Sum of Df Mean of F-cal F-crit Decision													
Variance	Squares		Squares										
	86												
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Between Groups	31.52	2	15.76	2.18	2.99	Not					
Within Groups	934.29	129	7.24			Significant					
Total	965.81										

Table 8 reveals that the F-calculated value of 2.18 is less than the F-critical value of 2.99 at 0.05 level of significance. This implies that supervisors did not differ significantly in their mean ratings on the extent of power-point presentation skills possessed by secretaries for effective work performance in Colleges of Education in Delta State based on qualification. Therefore, the hypothesis was upheld.

Discussion of Results

The result of the analysis in respect of research question one as presented in Table 1 showed that supervisors rated word processing skills as being moderately possessed by secretaries in colleges of education in Delta State. This finding aligns with the research of Duniya (2011) who found that word processing skills are required of secretaries in the present electronic office. Similarly, Azuka (2007) posited that because of the significant improvement of the word processing application from the traditional typewriter that a secretary in this computer age is supposed to possess reasonably the word processing skills for effective office functions. Therefore, secretaries in colleges of education in Delta State should enhance their word processing skills to improve on their "moderate" expertise status.

Result of data analysis in respect of research question two revealed that supervisors rated electronic spreadsheet skills as being possessed at a moderate extent by secretaries in colleges of education in Delta State. This finding conforms to the result of Okoro (2013) who found that polytechnic Office Technology and Management lecturers in South-South Nigeria possess electronic spreadsheet application competency needed to teach their students the basic skills of the application. Also, Garba (2012) revealed that business educators are competent in the use of spreadsheet application in teaching their students. These separate researches show the importance of electronic spreadsheet application skills, not only to the lecturers who teach the secretarial students but particularly for the graduates (secretaries) to enable them perform optimally in the computer driven offices. It is imperative for these secretaries to upgrade their electronic spreadsheet skills especially ability to create formula to carryout arithmetic computation.

The result of the analysis with regard to research question three showed that supervisors rated internet application skills as being moderately possessed by secretaries in colleges of education in Delta State. This finding is in consonant with the result of Okolocha and Olanye (2015) which showed that secretaries in government ministries in Delta State fairly possessed internet application skills. Again, the finding is related to the study of Okeke and Ezenwafor (2012) which found

that business education lecturers in Nigerian South-East universities fairly possessed internet operation competencies. Similarly, the finding is in accord with the result of the study conducted by Ohakwe (2008) that internet networking skills are needed by National Diploma Secretarial studies graduates. Egbri (2012) held that business education teachers are familiar with internet facilities but that they are not adequately exposed to using internet resources. Skills to carryout internet operations are very necessary for secretaries to possess. These skills will enable them to operate all the functions of the e-mail, facebook, twitter, google services and other internet applications.

The result of research question four indicated that supervisors rated powerpoint presentation skills as being moderately possessed by secretaries in colleges of education in Delta State. This means that the extent to which secretaries in colleges of education in Delta State possess power-point presentation skills was not adequate especially the ability to add sounds and animation in a presentation as well as running a slide show. This finding is in conformity with Okolocha and Olanye (2015) who found that secretaries in government ministries in Delta State, Nigeria possessed power-point presentation competencies. Onyesom (2014) in stressing the usefulness of the power-point presentation, pointed out that it is gradually becoming a common feature of classrooms, conferences, seminars, workshops, project defenses and proposals, staff training programmes, board meetings and even church services. Onyesom maintained that power-point is a worthwhile technology that tends to motivate audience and enhance their retentive and imaginative capacity. Therefore, secretaries need power-point presentation skills to be effective office personnel.

The results obtained from the test of hypotheses showed that all the four hypotheses tested were upheld. This means that the Deans, Directors and HODs (supervisors) in colleges of education in Delta State did not differ significantly in their responses on the extent their secretaries possess word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills. The supervisors held various academic qualifications (such as B.Sc/HND, M.Sc and Ph.D) and designations (such as deans, directors and heads of departments/units). Irrespective of these demographic differences among the supervisors, their ratings on the extent their secretaries possess the various computer skills examined were not significantly different. Hence, the four null hypotheses were upheld.

Conclusion

In light of the findings of this study, it was concluded that secretaries in colleges of education in Delta State moderately possessed word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills. However, the moderate possession of computer skills by the secretaries may be limiting their effectiveness and efficiency in the present computer driven offices.

Recommendations

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

- 1. Authorities of colleges of education in Delta State should extend TETFUND sponsorship to secretarial staff to enable them attend computer and technology training workshops, seminars and conferences for purpose of enhancing their technological skills.
- 2. Authorities of colleges of education in Delta State should regularly organize retraining programme for secretaries in the usage of the computer applications.
- 3. Authorities of colleges of education in Delta State should partner with national and international ICT training firms like Afrihub, NIIT to grant secretaries access to computer training.
- 4. Secretaries in colleges of education in Delta State should regularly make personal efforts to update their computer skills in line with technological trends.

References

- Adozoga, G. D. & Massnawa, M. (2003).Management information system and secretarial profession. Workshop Proceedings of National Association of Professional Secretarial Staff of Nigeria held from 6th – 10th of October, 2003 at the Federal Polytechnic, Bida, Niger State.
- Azuka, E. B. (2007). *Electronic word processing with Microsoft word: An ICT package*. Enugu: Cheston Agency Ltd.
- Duniya, A.P. (2011). Electronic office skills required by secretaries in polytechnics in polytechnics in Kogi State. Business Education Journal 8, (1), 169 181.
- Egbri, J. N. (2012). Assessment of the use of ICT in the teaching and learning of business education in University of Benin. Journal of Business Education, 8(2), 290-303.
- Ejeka, C. A. (2004). Office practice for tertiary institutions. Onitsha: Noben Press Ltd.
- Enyekit, E. O. (2006). Reviving the falling standard of education in Nigeria: A counseling implication. *African Journal of Educational and Research Development*, 1(1), 9-15.
- Garba, A. (2012). Self-assessment on knowledge of office information system applications(Unpublished Master's Thesis).Nnamdi Azikiwe University, Awka.

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- Mbaezue, A. N. C. (2010). *ICT and business education in a globalized economy*. Enugu: J. I. C. Publishers.
- Ndukwe, C. M. (2005). *Window based applications packages*. Enugu: El'Demak Publisher.
- Oduma, C. A. (2006). Towards improving the employability competence of business education graduates in the information and communication technology era. *Journal of Information and Communication and Computing Technologies*, 2(1), 101-105.
- Ohakwe, S. N. (2008). ICT sub-skills required by national diploma secretarial studies graduates for promotion of private enterprise. *Business Education Journal*, 6(2), 96-111.
- Okeke, A. U. & Ezenwafor, J. I. (2012). Office technology skills for e-learning possessed by business educators in universities in South East States of Nigeria. *International Journal of Educational Research and Development*, 4(1), 193-200.
- Okolocha, C.C. and Olanye, V.E. (2015). Supervisors' assessment of computer-based competencies possessed by secretaries in government ministries in Delta State of Nigeria. *International Journal of Management Sciences*, 5(6), 467-475.
- Okoro, B. O. (2013). Assessment of information and communication technology competencies possessed by polytechnic OTM lecturers in south-south geo political zone of Nigeria (Unpublished Master's Thesis).Nnamdi Azikiwe University, Awka.
- Onyesom, M. (2014).Pedagogical elements of the new technologies for teaching and learning in business education.*Nigerian Journal of Business Education*,2(1), 125-134.

AWARENESS LEVEL OF SME MANAGERS ON THE INFLUENCE OF SOCIO-CULTURAL FORCES ON BUSINESS OPERATIONS IN ANAMBRA STATE

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ABSTRACT

The study sought to determine the awareness level of SMEs managers' on the influence of socio-cultural environmental forces on their business operations in Anambra State. One research question and two null hypotheses guided the study. Descriptive survey design was adopted. The research population comprise of 811 managers of small and medium enterprises registered with the Anambra State Ministry of Commerce and Industry. A sample size of 243 SMEs managers was selected for the study using proportionate stratified random sampling. A structured and validated five point rating scale questionnaire containing 10 items was used for data collection. Cronbach Alpha method was used to establish the reliability of the instrument which yielded coefficient of 0.85. The researchers administered the instrument with the help of three research assistants in the state. Data collected were analyzed using mean and standard deviation to answer the research question while ttest and Analysis of Variance (ANOVA) were employed to test the hypotheses at 0.05 level of significance. Findings revealed that SMEs managers' in Anambra State were highly aware of the influence of socio-cultural environmental forces on their business operations. The study further revealed that gender and years of experience were not significant factors on the SME managers awareness level of the influence of sociocultural forces on their business operation. It was concluded that majority of the owners of SMEs in Anambra State understands the importance socio-cultural environmental forces can play in success of their business operations and are conscious of the changes in the business that could result as a result in these sociocultural forces. The researchers recommended among others that SME managers should constantly review, modify and develop new policies in line with changes in socio-cultural environmental forces. This is because high awareness alone without proper implementation of policies cannot guarantee business success. SMEs

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managers should engage in regular market research in order to recognize current needs, value, taste and preference of the type of goods consumers are looking for in the marketplace.

Key Words: Awareness, Socio-cultural Environmental forces, SMEs

Introduction

Business enterprises are organizations concerned with the production and rendering of goods and services that meet and satisfy human wants. Business enterprises produce goods and services for consumers with the aim of making profit. They are categorized into small and medium scale enterprise and large scale enterprise. The United States of America Small Business Administration in Oghojafor, Okonji,Olayemi and Okolie (2011) viewed a small and medium scale enterprise (SME) as a business enterprise independently owned, which is not a dominant entity in its field of operation.

Small and medium scale enterprises (SMEs) are self-generated ventures, operating in small capacity within any economy. SMEs play indispensable roles in stimulating and transforming entrepreneurial ventures in developed and developing economies of the world and provide cheaper outlet for an entrepreneur to explore and enter the business world. There is no universally acceptable definition for SMEs among scholars as every country defines it differently but the common characteristics in the definitions are coined around the number of employees, annual sales turnover and management style. According to Gbandi and Amissah (2014), SMEs in Nigeria are based on capital employed, turnover and number of employees. For instance, in the archives of the Central Bank of Nigeria (CBN, 2005), small and medium scale enterprises was defined as all businesses with a total assets and investment of less than one million Naira (\$1,000,000) with a total number of employees less than fifty. Similarly, Sokoto and Abdullahi (2013) defined SMEs as business enterprises with total capital employed of not less than \$1.5 million but not above \$200 million, including working capital but excluding the cost of land with not less than 10 staff but not exceeding 300.

An SME exists within an environment which consists of a set of physical, biological, socio-cultural and political forces that surround and ultimately determine the sustainability of SMEs. The success of SMEs is a product of many actors within the environment which pose great challenges that have to be overcome by the organization. In contemporary Nigeria business environment, different forces which are called environmental forces affect business operations and organizational performance either positively or negatively. Environmental forces consist of external influences peculiar to the activities of a business enterprise in a locality. Environmental forces create challenges and opportunities for business enterprises (Pearce & Robinson, 2007). The changing and dynamic nature of an environment

demands that SMEs have to act and react to events that happen outside and within the business premises. Environmental forces can be micro or macro in nature.

Macro-environmental forces are often referred to as remote, general or operating environment. Macro-environmental forces affect the internal functions, objectives and strategies of SMEs and are not easily influenced by management since they are external to the enterprise. One of these macro-environmental forces is the socio-cultural environmental forces. Socio-cultural environmental forces regulate the values, attitudes, taste, fashion and customs of a society. They are social conditions and aspects of a country's culture that create environmental goodwill or present pressures that could stifle the operational activities of SMEs (Gurol & Aitsan, 2006). SME managers must change their operational strategies overtime and start to produce up-to-date goods that will attract and retain customers in order to remain in business (Aliyu, 2014).

Business enterprises are established to achieve and accomplish certain profitable objectives. Thus, the success of every SME depends on how well it adapts to the socio-cultural forces within which it operates. Presently, managers SMEs in Nigeria are faced with a number of socio-cultural forces compelling them to re-think their approach to various business operations. The manager of SMEs could be male or female for it is not gender sensitive. According to Salami (2013), socio-cultural forces are the most difficult uncontrollable variables to predict. Therefore it is important for the managers of SME, whether male or female irrespective of gender to be conscious of its influence so as to achieve business goals. Gender as a variable could play an important role in the level of awareness of managers of SMEs. Similarly, years of experience (0-5 years, 6-10 years and above 10 years) could influence awareness of SME managers on the influence of socio-cultural environmental forces on organizations' business operations. Managers with above 10 years experience could have a higher level of awareness than those with 6-10 years experience while those with 6-10 years could be more aware than those with 0-5 years experience. The differences in level of awareness could be as a result of having been in the business for long and acquiring more knowledge of the significance of socio-cultural forces on business dealings. Awareness is the act of knowing something, knowing that something exists and its importance (Hornby, 2015). In the context of this study, awareness is the act of being conscious of the impacts of socio-cultural forces on the operations of SMEs.

In spite of the laudable role of SMEs in the economy, it is discouraging to observe that many of them that enter the business world in Nigeria every year fail rather than succeed. Nwachukwu (2009) regretted that only about ten percent of SMEs in Nigeria survive the first few years of operation. This means that 90 percent are either ailing or have closed down. The failure could also be attributed to insufficient awareness of managers on the influence of socio-cultural forces such as age distribution of consumers, ethnic values of consumers, social status of the consumers, religious affiliations of the consumers, social classes in the society among

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others on SMEs' operational activities. There is therefore the need for managers of SMEs to be aware of the changes that constantly occur in the business environment because the success or survival of business enterprises could be determined by how knowledgeable managers are. It is against this backdrop that this study sought to determine the awareness level of SMEs' managers in Anambra State on the influence of socio-cultural forces on their business operations in Anambra State

Statement of the Problem

A business enterprise and its environment are mutually inter-dependent. One of the surest ways through which SMEs attain success in their business operations is through effective handling of socio-cultural forces because managers of business enterprises operate in a dynamic environment. According to Alexander (2000), the dynamic and rapidly changing environment in which most owners of SMEs compete have macro-environmental forces such as socio-cultural among others that play major roles in the survival and performance of their enterprises. These roles include among others, determining the total amount of money available to customers and businesses to make purchases, enhancing the ability and willingness of individuals and SMEs to perform transactions to acquire goods and services they want and influencing customers' behaviour which affect sales volume and profit.

Small and medium scale enterprises do not pay needed attention to their environment by conducting and embarking on periodic environmental scanning. Hence, an SME manager who wants to succeed must have a clear understanding and awareness of socio-cultural forces that can positively or negatively affect their business operations. It seems that the managers of these SMEs fail to adopt appropriate environmental strategies that will ensure long-term sustainability of their business enterprise. Through this research, managers will be able to plan, implement and evaluate their business operations by anticipating environmental changes, remaining flexible and acting progressively to maximize and actualize success in their business.

The problem of this study is that despite the vital roles of SMEs in any economy, their failure level in Nigeria has remained consistently high while theawareness level of SMEs managers on the influence of socio-cultural environmental forces on their operational activities in Anambra is not clearly known. Hence, this study is imperative as it will reveal the level of awareness of SMEs managers on the influence of socio-cultural environmental forces to enable them take objective actions to remedy any difficulties.

Purpose of the Study

The purpose of this study was to determine the awareness level of SMEs' managers on the influence of socio-cultural environmental forces on their business operations in Anambra State.

Research Question

The following research question guided this study:

1. What is the awareness level of SME managers on the influence of sociocultural environmental forces on their business operations in Anambra State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance

- 1. Male and female respondents do not differ significantly in their mean ratings on the awareness level of the influence of socio-cultural environmental forces on their business operations in Anambra State.
- 2. Managers of SMEs do not differ significantly in their mean ratings on the awareness level of the influence of socio-cultural environmental forces on their business operations in Anambra State as a result of years of experience (0-5 years, 6-10 years and above 10 years).

Method

Descriptive survey research design was adopted for this study. This study was carried out in Anambra State. The population for this study consisted of 811 managers of small and medium enterprises registered with the Anambra State Ministry of Commerce and Industry as at 17th August, 2017. A sample size of 243(143males and100 females) managers of SMEs in Anambra State was selected using proportionate stratified random sampling technique. The sample size was determined by 30% of male and female owner each. The data for the study was collected through questionnaire titled "Influence of Socio-cultural Environmental Forces on SMEs Questionnaire (ISEFSMEQ)". The questionnaire has two sections, A and B. Section A contained items on demographic information of the respondents such as gender and years of experience while Section B contained 10 items and structured on a 5 point rating scale of: Very Highly Aware (VHA), Highly Aware (HA), Moderately Aware (MA), Slightly Aware (SA) and Not Aware (NA).

The face validity of the instrument was ascertained using the opinions of two experts in Business Education and one in Measurement and Evaluation from Nnamdi Azikiwe University, Awka. Cronbach Alpha method was used to establish the internal consistency of the items in the instrument. The reliability coefficients obtained was 0.85. Data collected were analyzed using mean, to answer research question and standard deviation to determine the closeness or otherwise of the respondents' responses to the mean; while t-test and Analysis of Variance (ANOVA) were used to test the two hypotheses.

Results

Data collected in respect to this research question were analyzed and the result is presented below

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Table 1

Respondents' mean ratings on their awareness level of socio-cultural environmental forces on their business operations

S/	Items on socio-cultural environmental	π	SD	Remarks
Ν	forces			
1	Changes in the pattern of fashion have	0.79	0.70	Highly Aware
	influence on the decision of customers to			
	purchase clothing from SMEs			
2	Disparities in consumer sensitiveness to	3.82	0.64	Highly Aware
	products have influence on the production			
	capacity of SMEs			
3	Age distribution of consumers have influence	3.74	0.74	Highly Aware
	on the consumption of SMEs products			
4	Ethnic values of consumers have influence on	3.81	0.59	Highly Aware
	sales of SMEs products			
5	Social status of the consumers in the society	3.79	0.57	Highly Aware
	have influence on the business packaging			
_	system		0.40	
6	Religious affiliations of the consumers have	3.76	0.63	Highly Aware
	influence on the type of products offered by			
-	SMEs	2.06	0.65	TT' 11 A
7	Social classes in the society have influence on	3.86	0.65	Highly Aware
0	the channel of distribution of products offered			
8	by SMEs	274	0.00	TT' 1 1 A
0	Customers' educational background has	3.74	0.66	Highly Aware
9	influence on the quality of SMEs products	2.05	0.02	TT: - 1-1 A
10	Cross cultural difference of customers have	3.85	0.62	Highly Aware
10	influence on the type of products offered to	3.76	0.63	Highly Aware
	them by SMEs			
	Language of the people have influence on the			
	operations of SMEs	2 70		TT'. 1.1 A
	Cluster Mean	3.79		Highly Aware

Data in Table 1 show that the 10 items have mean ratings ranging from 3.74 to 3.86 with a cluster mean of 3.79. This means that SMEs managers were highly aware of the influence of socio-cultural environmental forces on their business operations in Anambra State. The standard deviations for all the items are within the range of 0.57 to 0.74 showing that the respondents are not wide apart in their ratings.

Table 2

t-test summary analysis of awareness level of male and female SME managers on the influence of socio-cultural environmental forces on their business operations

Gender		Ν	π	SD	df	t-cal	t-crit	Decision
Male		103	3.96	0.82				
	190	0.30) 1	.96	No	ot Signific	ant	
Female		89	3.92	0.84				

The result in Table 2 shows that male respondents (103) had a mean response of 3.96 and a standard deviation of 0.82 while the female respondents (89) had mean response of 3.92 and a standard deviation of 0.84. The calculated t-value of 0.30 is less than the t-critical value of 1.96 at 0.05 level of significance and 190 degree of freedom. This revealed no significant difference and therefore, the null hypothesis is accepted. This means that male and female respondents do not differ significantly in their mean ratings on their awareness level of the influence of socio-cultural environmental forces on their business operations in Anambra State.

Table 3

One – way Analysis of Variance (ANOVA) for the mean of SMEs managers with 0-5, 6-10 and above 10 years of experience on their awareness level of the influence of socio-cultural environmental forces on their business operations

Sources of Variance	Sum of Squares	DF	π Square	F-cal	F-crit	Decision
Between Groups	0.01	2	0.05	0.33	3.35	Not Significant
Within Groups	4.11	27	0.15			
Total	4.12					

Data on Table 3 shows that F-cal of 0.33 is less than the F-crit of 3.35 (0.33 < 3.35) at 0.05 level of significance with 2 and 27 degree of freedom therefore the null hypothesis is accepted. This means that respondents did not differ significantly in their mean ratings on their awareness level of the influence of socio-cultural environmental forces on their business operations in Anambra State as a result of years of experience.

NAU Journal of Technology & Vocational Education Vol.3 No.1 2018. All Rights Reserved. http://www.naujtved.com.nq Awareness Level of SME Managers on the Influence of Socio-cultural Forces...

Discussion of Results

Findings of the study revealed that managers of small and medium scale enterprise in Anambra State are highly aware of the influence of socio-cultural environmental forces on their business operations. Changes in the pattern of fashion, disparities in consumer sensitivities to products, age distribution of consumers, ethnic values of consumers, social status of the consumers in the society, religious affiliations of the consumers, social classes in the society, customers' educational background, cross cultural differences of customers and languages of the people have influences on the operations of SMEs. This finding tallies with that of Wanjohi and Mugure (2008) which discovered that managers of small and medium scale enterprises are highly aware of the influence of socio-cultural environmental forces on their business operations. Socio-cultural environmental forces affect the marketstrategies put in place by any business enterprise, whether big or small in the market place. The outcome of this study also agrees with the finding of King and McGrath (2010) that managers of small and medium scale enterprises are highly aware of the influence of socio-cultural environmental forces on their business operations.

The high awareness of SMEs managers on the influence of socio-cultural environmental forces on their business operations is important to the success of SMEs businesses. However, the fact that SMEs have continued to fail could be attributed to poor planning and inadequate utilization of marketing strategies in their marketing campaigns so as to stand a better chance of attracting more customers. Zimmerer and Scar-borough (2009) stated that awareness alone does not bring business success, but SMEs managers must put in place and utilize marketing strategies so as to respond to changes in socio-cultural environmental forces which could negatively affect customers' perception about the products offered.

Furthermore, this study also found no significant difference in the mean ratings of respondents on their awareness level on the influence of socio-cultural environmental forces on their business operations as a result of gender and years of experience. This is in agreement with the findings ofHenry, Foss, Fayolle, Walker and Duffy (2015), that there is no significant difference in the awareness level on the influence of socio-cultural environmental forces on their business operations as a result of gender and experience of SMEs managers on the ground that socio-cultural environmental forces thought and behavior within social setups.

Conclusion

In the light of the findings of this study, the researchers conclude that the majority of the managers of SMEs in Anambra State understand the importance the socio-cultural

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environmental forces can play in the success of their business operations and are conscious of the changes in the business that could result as a result of changes in this environmental force.

Recommendations

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

- 1. SME managers should constantly review, modify and develop new policies in line with changes in socio-cultural environmental forces. This is because high awareness alone without proper implementation of policies cannot guarantee business success.
- 2. Managers of SMEs should engage in regular market research in order to recognize current needs, value, taste and preference of the type of goods consumers are looking for in the marketplace.
- 3. The teaching of socio-cultural environmental forces should be integrated into the curriculum of Business Education in order to expose students to the complex nature of the business environment upon graduation.

References

- Aliyu, M. S. (2014). Relationship between market orientation and firm performance: A look at Nigerian SMEs. *Developing Country Studies*, 4(2), 87-93.
- Alexander, L. D. (2000). Successfully implementing strategic decisions. Long Range Planning, 18(3), 91-97.
- Central Bank of Nigeria (2010).Business expectations survey.A Quarterly Publication of the Central Bank of Nigeria, 2nd Quarter, 2010.
- Gbandi, E. & Amissah, G. (2014). Financing options for small and medium enterprises (SMEs) in Nigeria. *European Scientific Journal*, 10, 1-14.
- Gurol, Y. & Aitsan, N. (2006).Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education* + *Training*, 48(1), 25-38.
- Henry, C., Foss, L., Fayolle, A., Walker, E. & Duffy, S. (2015). Entrepreneurial leadership and gender: Exploring theory and practice in global contexts. *Journal of Small Business Management*,53(3), 581–586. http://dx.doi.org/10.1111/jsbm.12174

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- Hornby, A. S. (2015). Oxford Advanced Learners' Dictionary of current English. Ney York, USA: Oxford University Press.
- King, K., & McGrath, S. (2010). Globalization, enterprise and knowledge: Educationaltraining and development. *International Review of Education*, 50(1), 74 – 76.
- Nwachukwu, A. C. (2009). The role of entrepreneurship in economic development: The Nigerian perspective. *European Journal of Business Management*, 4(8), 119-125.
- Mawoli, M. A. & Aliyu, A. N. (2010). Entrepreneurship and Small Business Management in 21st Century Nigeria. Makurdi: Aboki Publishers.
- Oghojafor, Okonji,Olayemi&Okolie, (2011). Fifty years of entrepreneurship development in Nigeria: Challenges and prospects. 10th International Entrepreneurship Forum, Tamkeen, Bahrain, 9-11 January 2011.
- Pearce, J. A., & Robinson, Jr. R. B. (2007). Formulation, implementation and control of competitive strategy(10th Ed.). Chicago: Richard D. Irwin.
- Salami, S. S. (2013). Awareness on the influence of macro-environmental forces on marketing activities of small scale business operators in Oyo State. (*Masters degree thesis*), University of Nigeria Nsukka.
- Sokoto, A. A. & Abdullahi, Y. Z. (2013).Strengthening small and medium enterprises (SMEs) as a strategy for poverty reduction in north western Nigeria.American Journal of Humanities and Social Sciences, 1(3), 189-201.
- Wanjohi, A.M., & Mugure, A., (2008).Factors affecting the growth of MSEs in rural areasof Kenya: A case of ICT firms in Kiserian Township, Kajiado District of Kenya.
- William, D. P. & McCarthy, J. E. (2002). *Basic marketing: A global managerial approach*. Michigan: Times Mirror Higher Education Group. Inc. Company.
- Zimmerer, T. W., & Scarborough, N. M., (2009). Essentials of entrepreneurship and small business management. New York: Prentice Hall.

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STRATEGIES CONSIDERED EFFECTIVE FOR TEACHING ENTREPRENEURSHIPBY BUSINESS SUBJECT TEACHERS IN SECONDARY SCHOOLS IN ANAMBRA STATE

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Abstract

This study sought to ascertain the opinions of business subject teachers on the strategies considered effective for teaching entrepreneurship in secondary schools in Anambra State. Two research questions and four hypotheses guided the study. Descriptive survey research design was adopted for the study. The population comprised 513 business subject teachers. A sample size of 244 business subject teachers was selected for the study using simple random sampling technique. A structured and validated questionnaire with 18 items was used for data collection. Mean was used to answer the research questions while standard deviation was used to check how close or otherwise of the respondents responses to the mean. t-test and ANOVA were used to test the hypotheses. Findings of the study revealed that the use of information and communication technology and school-industry partnership were highly effective strategies for teaching entrepreneurship. Based on the findings of the study, it was concluded that information and communication technology strategies and school industrial collaboration strategies are considered highly effective for teaching entrepreneurship. It was also concluded that gender and type of school do not affect the strategies considered effective for teaching entrepreneurship. It was recommended amongst others that, the Anambra State Government should provide funds for secondary school management, regular training and retraining programmes of business subject teachers both in public secondary schools to enable them update their ICT skills so as to utilize new technologies for instructional purposes.

Keywords:Entrepreneurship,Informationandcommunicationtechnology and schoolindustrial partnership.

Introduction

In recent times, entrepreneurship has been found to be worthy in developing human capital and also the economic drive of a nation at large. Entrepreneurship education was specifically introduced in the Nigerian secondary school curriculum to disseminate information, skills and motivation that promote entrepreneurial success in a variety of settings (Onuka, 2008). Thus, Anambra State keyed in by teaching Strategies Considered Effective for Teaching Entrepreneurship ...

entrepreneurship studies in her secondary schools. Entrepreneurship studies is a vital instrument that serves as an antidote for mass unemployment especially among secondary school drop outs, the graduates and to developing nations such as Nigeria. Entrepreneurship studies equips individuals with skills, knowledge, attitudes and competences needed to discover business opportunities in a dynamic environment, venture into the risk of business, create an enabling business relationship become a successful entrepreneurs. Ofsted (2011) saw entrepreneurship studies as equipping children and young people with the knowledge, skills and understanding to help them make good use of the economic, business and financial environments in which they live. Entrepreneurship education according to Ezeani (2012) is referred to programs that promote and provide skill training for business creation and development.

Entrepreneurship education is geared towards developing a strong, innovative, risk-venturing, well motivated and highly enterprising individuals. In support of this, Onuka (2008) stated that entrepreneurship seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. It equips the learner with the skills of realizing new business opportunities, making effective decisions, developing ideas, and methods for taking business risks and establishing mutual business relationship for successful operation. In order to impart this knowledge into students, it takes a competent teacher and the use of effective strategies. Such strategies could be the use of Information and Communication Technology (ICT) and school-industrial collaboration.

Information and Communication Technology has taken over the world, making it a global village. Through ICT, so many achievements have been made. ICT enables technological innovation and development, fast dissemination of information, socio-economic/ cultural/ technological development and it is widely used in the teaching and learning.ICT has several definitions depending on the nature of its use. According to Hennessy, Onguko, Harrison, Ang'ondi (2010), Information and communication technology is used as an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems, as well as the various services and applications associated with them, such as video conferencing and distance learning. Ogundipe (2012) defined ICT as an electronic device, which is manufactured to accept an ordered sequence of instruction given to it in an appropriate language and to carry out these instructions with great speed and accuracy.

In recent times, ICT is rapidly transforming the way people access information and services, communicate with each other, entertain themselves and even do business (Hennessy, Onguko, Harrison & Ang'ondi, 2010). Internet and social media platforms are strong points in ICT. Most job adverts and its application process is carried out on the above platforms, thus, ICT entrepreneurs generate money by sourcing out the information from the internet, filling and submitting the

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forms online for their clients. Internet and social media platforms also aids buying and selling of goods and services. Therefore, ICT competencies are very necessary and mandatory, for one to be gainfully employed in the society in the current economy after secondary education. These competencies are equally necessary in starting one's own business. Teachers should make use of ICT gadgets in teaching entrepreneurship so to impart the competencies to the students. Teachers as well should engage themselves in other forms of training to update their knowledge on ICT usage as such will improve the quality of their teaching/lesson delivery. Moreover, there is need for schools to create a relationship with industries so that students can visit the industry and learn the practical aspect of entrepreneurial processes.

School-industrial linkage is one of the pedagogical methods adopted in the teaching/learning situation for easy acquisition of skills. It has to do with the relationship between school and the industry. According to Odu (2010), schoolindustry linkage is the collaboration between formal education and meaningful industrial work experience, which enable students to acquire knowledge, skills and appropriate attitude to work. Elechi (2009) posited that school industrial collaboration is one of the best pedagogical methods or practices to enhance students learning experiences. It is one of the strategies used to promote entrepreneurial skills acquisition in the schools (Yusuf, 2011; Onele & Nwite, 2011). It is also the process through which the school gains and gives assistance to the industry and the industry in turn exposes students to real and practical job experiences. The two parties play vital roles and complement each other. In support of the above, Wright in Elechi (2009) stated that school industry link provides the means by which teachers and students can have access to more accurate information about various types of work and requisite skills possessed in entrepreneurship to be independent and self reliant. Hence, it is necessary in building up knowledge and skill for self reliance.

However, it is the responsibility of the business teacher who teaches entrepreneurship to identify and use the various effective strategies for imparting an in-depth knowledge, skills and competencies since entrepreneurship education is the purposeful intervention by business subject teachers in the life of the learner to impact entrepreneurial qualities and skills that would enable the learner to survive in highly competitive world of business (Orji, 2015). This would enable the students upon graduation to be useful within the society and benefit as they transit to higher institution as well. Meanwhile, gender and school ownership could be determinant factor on the various strategies to be used by business subject teachers for teaching entrepreneurship. Gender according to Wall (2015) is the state of being male or female which affects role performance. Gender of business subject teachers may have little influence on the strategies considered effective when it comes to teaching of entrepreneurship. That is to say that there are indications of gender bias when considering strategies used in teaching entrepreneurship education; that is, male Strategies Considered Effective for Teaching Entrepreneurship ...

business subject teachers tend to consider some strategies effective while female does not consider them effective (Kabeer, 2009).

School Ownership also may determine the type of strategies to be adopted in teaching entrepreneurship. School ownership in Nigeria is classified into two; the public and the private owned schools. Public secondary schools are those own and managed by the state and federal government, while the private schools are owned and managed by the individuals who established such schools. It could be that business subject teachers in both private and public secondary schools have different views about strategies for teaching entrepreneurship education. It was against this background that this study sought to ascertain the opinion of business subject teachers on the strategies considered effective for teaching entrepreneurship education in the secondary schools in Anambra State. More so, this study would be beneficial to the students, classroom teachers, the curriculum planners when published. The students' parents, community and the state at large will benefit as well.

Statement of the problem

Entrepreneurship studies are skill subjects that require student centred / practical instructions for mastery of the subject by the students. Thus, this could be achieved through the use of effective strategies in teaching it, as this will expose students to work methods and techniques in handling equipment and machinery. This will in turn impart in the students the necessary skills and knowledge required for success in life. It will also increase their job opportunity and self- employment after their secondary school and minimize the rate of unemployment amongst secondary school leavers.

Most of the secondary school leavers in Anambra state do not possess adequate skills that will enable them get jobs or even create jobs themselves after graduation. Many secondary school leavers resort to street hawking and some engage in all manner of social misconducts when they cannot get admission into higher institutions. This implies that the progress of entrepreneurship in attaining its purpose is yet to be fully achieved. This might be attributed to the strategies utilized by the teachers in teaching entrepreneurship. This study sought to ascertain the opinion of business subject teachers on the strategies considered effective for teaching entrepreneurship in the secondary schools in three education zones (Aguata, Awka, Ogidi) in Anambra State.

Purpose of the study

The main purpose of this study was to ascertain the strategies considered effective for teaching entrepreneurship by business subject teachers in Anambra State. Specifically the study ascertained the opinions of business subject teachers on the:

1. Information communication technology (ICT) strategies considered for effective teaching of entrepreneurship education in secondary schools.

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2. School-industrial collaboration strategies considered for effective teaching of entrepreneurship education in secondary schools.

Research Questions

The following research questions guided the study:

- 1. What information communication technology (ICT) strategies do business subjects teachers consider effective for teaching entrepreneurship education in Secondary schools in Anambra State?
- 2. What school-industrial collaboration strategies do business subjects teachers consider effective for teaching entrepreneurship education in Secondary schools in Anambra 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 business subject teachers on the Information and Communication Technology (ICT) strategies considered effective for teaching entrepreneurship education in secondary schools.
- 2. Business subject teachers in the state, federal and private owned secondary schools in Anambra State do not differ significantly in their mean ratings on the information and communication technology (ICT) strategies considered effective for teaching entrepreneurship education in secondary schools.
- 3. There is no significant difference in the mean ratings of male and female business subject teachers on school industrial collaboration strategies considered effective for teaching entrepreneurship education in secondary schools.
- 4. Business subject teachers in the state, federal and private owned secondary schools in Anambra State do not differ significantly in their mean ratings on the school-industrial collaboration strategies considered effective for teaching entrepreneurship education in secondary schools.

Method

Descriptive survey design was used for the study. The area covered was Anambra State. The population of the study comprised 513 business subject teachers in 784 secondary schools in Anambra State. However, 244 teachers made up the sample size of the study from three education zones namely Aguata, Ogidi and Awka, using simple random sampling technique. The instrument for data collection was an 18-item structured questionnaire developed by the researcher. Cronbach Alpha reliability coefficient was used to determine the internal consistency of the instrument. Mean was used to answer the research questions while standard deviation was used to check how close or otherwise of the respondents responses to the mean. t-test and ANOVA were used to test the hypotheses. Means scores ranged from 4.50 - 5.00 were

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rated Very Highly Effective (VHE), and mean scores ranged from 3.50 - 4.49 were rated Highly Effective (HE). Mean scores ranged between 2.50 - 3.49 were rated Moderately Effective (ME), mean scores between 1.50 - 2.49 were rated Less Effective (LE) and mean scores between 0.50 - 1.49 were rated Very Less Effective (VLE).

Regarding the hypotheses, when the p-value is less than 0.05 (P < 0.05), the null hypothesis was not rejected, otherwise, reject the null hypothesis. The analysis was done using the Statistical Package for Social Sciences (SPSS) version 23.0.

Results

Table 1

S/N	ICT Strategies	X	SD	Remarks
1	The use of computer programs to show entrepreneurship analysis such as business transaction data.	4.52	.60 V	/.H.E
2	The use of film display to show a production process like cake and soap making.	4.27	.56	H.E
3	The use of CorelDraw to showcase entrepreneurial procedures with computer such as photo editing.	4.24	.54	H.E
4	The use of power point presentation to teach how to discover opportunity and skill(s) to harness such opportunity.	4.27	.50	H.E
5	The use of world wide web search engine to browse and display entrepreneurial data such as networking business on the internet.	4.37	.54	H.E
6	The use of duplicating/photocopying machines to demonstrate the process for the students.	4.37	.59	H.E
7	The use of printing machine to demonstrate printing operations for the students.	4.41	.68	H.E
8	The use of entrepreneurship education software like corel draw and photo-shop to edit photos in the computer.	4.29	66	H.E
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Respondents' mean ratings on information and communication technology strategies considered effective for teaching entrepreneurship. (N = 244)

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Clu	ıster Mean	4.33	H.E			
	entrepreneurship to students.		4.29	.00	H.E	
9	The use of social media like whatsAp	p and facebool	and facebook to teach $\frac{1}{4}$ 20			

Data in Table 1 show that out of nine items listed on the information and communication technology teaching strategies, respondents considered the first item as very highly effective with mean score of 4.52 and the remaining eight items are considered highly effective. The cluster mean score of 4.33 shows that business subjects teachers considered the use of information and communication technology teaching strategies highly effective for teaching entrepreneurship in secondary schools. The standard deviations for all the items range between 0.54 to 0.68. This shows that the respondents are close in their responses.

Table 2

	ondents' mean ratings of school-industrial idered effective for teaching entrepreneurship.	$collaborement{(N = 2)}$	oration 44)	strategies
S/N	School-industry Collaboration Strategiea	X	SD	Remarks
10 11	Financial assistance by industries in conducting research on matters relating to entrepreneurship.	4.24	.49	H. E
11	Scholarship by industries to entrepreneurship students with outstanding performance during industrial training.	4.57	.55	V.H.E
12	Acceptance of students on field trips and excursions by the industries.	4.41	.55	H. E
13	Organization of workshops for entrepreneurship students by the industry for practical training.	4.48	.50	H. E
14	Proper orientation for entrepreneurship students in industries before commencement of industrial work training	4.64	.48	V.H.E
15	Utilization of industrial fellowship workshops and seminars for business subject teachers to impact students.	4.29	.46	H. E
16	Provision of flexible study schedule by the industrie as a guide to students enable them explore the wide range of available learning opportunities.	s 4.43	.50	Н. Е
17	Invitation of experts from industries to the schools as resource persons to demonstrate skills and production techniques on entrepreneurship to students.		.49	H. E

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18	Organization of short practical courses by the				
	industries for business teachers to update their knowledge and skills.		4.61	.49	V.H.E
	Cluster	4.45	H.E		

Data in Table 3 show that out of nine items listed on school-industrial collaboration strategies, the respondents considered items 11, 14 and 18 very highly effective while the remaining six items are considered as highly effective strategies. The cluster mean score of 4.45 indicates that business subjects teachers considered school-industrial collaboration strategies highly effective for teaching entrepreneurship in secondary schools. The standard deviations for all the items are within 0.46 to 0.55. This shows that the respondents are very close to their ratings.

Testing the hypothesis

Null Hypothesis 1

There is no significant difference in the mean ratings of male and female business subject teachers on the Information and Communication Technology (ICT) strategies considered effective for teaching entrepreneurship in secondary schools.

Table 3:

T-test comparison of male and female business subjects teachers mean ratings on information and communication technology strategies considered effective for teaching entrepreneurship.

Gender	Ν	X	SD	df	t-value	P-value	Decision
Male	85	38.50	2.16		1.22		
		242				0.23	Not Sign.
Female	159	39.38	2.17				

Table 3 show a t-value of 1.22 with a p-value of 0.23 at 242 degree of freedom which is greater than the significant value of 0.05 (0.23 > 0.05). This means that the respondents do not differ significantly in their mean ratings on information and communication technology strategies considered effective for teaching entrepreneurship as a result of gender. Therefore, the null hypothesis was not rejected.

Null Hypothesis 2

Business subjects teachers in state, federal and private owned secondary schools in Anambra State do not differ significantly in their mean ratings on the information and communication technology (ICT) strategies considered effective for teaching entrepreneurship in secondary schools.

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Table 4: One – way Analysis of Variance (ANOVA) on the mean ratings of respondents on the information and communication technology (ICT) strategies considered effective for teaching entrepreneurship based on ownership of schools

Sources of Variance	Sum of Squares	Df	Mean Square	F-ratio	p-value	Decision
Between Groups	13.36	2	6.68	1.43	0.25	not significant
Within Groups	158.63	241	4.66			
Total	172.00					

Table 4 show f-ratio of 1.43 at 2 and 241 degree of freedom with a p-value of 0. 25. Since the p-value of 0.25 is greater than 0.05 (0.25 > 0.05), the null hypothesis is not rejected. This means that business subjects teachers in state, federal and private owned secondary schools in Anambra State do not differ significantly in their mean ratings on the information and communication technology (ICT) strategies considered effective for teaching entrepreneurship in secondary schools.

Hypothesis 3

There is no significant difference in the mean ratings of male and female business subject teachers on school industrial collaboration strategies considered effective for teaching entrepreneurship in secondary schools.

Table 5

T-test comparison of male and female business subjects teachers mean ratings on the school-industrial collaboration strategies considered effective for teaching entrepreneurship.

Gender	Ν	X	SD	df	t-value	P-value	Decision
Male	85	38.75	1.95		2.79		
		242				0.08	Not Sign.
Female	159	40.67	2.15				-

Data in Table 5 show a t-value of 2.79 at 242 degree of freedom with a p-value of 0.08. Since the p-value of 0.80 is greater than 0.05 (0.08 > 0.05), this means that there is no significant difference in the mean ratings of male and female business subject teachers on school-industrial collaboration strategy considered effective for teaching entrepreneurship in secondary schools. Therefore, the null hypothesis was not rejected.

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Hypothesis 4

Business studies teachers in state, federal and private owned secondary schools in Anambra State do not differ significantly in their mean ratings on the schoolindustrial collaboration strategies considered effective for teaching entrepreneurship in secondary schools.

Table 6: One – way Analysis of Variance (ANOVA) on the mean ratings of respondents on the school-industrial collaboration strategies considered effective for teaching entrepreneurship based on ownership of schools

Sources of	Sum of		Mean			
Variance	Squares	Df	Square	F-ratio	p-value	Decision
Between Groups	8.890	2	4.445	0.87	0.43	not significant
Within Groups Total	174.138 183.027	241	5.122			

Data in Table 6 show f-ratio of 0.87 at 2 and 241 degree of freedom with a p-value of 0.43. Since the p-value of 0.43 is greater than 0.05 (0.43 > 0.05), the null hypothesis is not rejected. This means that business subjects teachers in state, federal and private owned secondary schools in Anambra State did not differ significantly in their mean ratings on the school-industrial collaboration strategies considered effective for teaching entrepreneurship in secondary schools.

Discussion

The findings of this study revealed that business subject teachers considered the use of ICT teaching strategy highly effective for teaching entrepreneurship in secondary schools in Anambra State. This is encouraging because out of nine items, one was rated very highly effective while the remaining eight was rated highly effective. The high ratings indicated that the use of power point presentation, World Wide Web search engine and other ICT strategies when teaching enhances students learning of entrepreneurship.

This is shown by a cluster mean score of 4.33 which is within the highly effective (3.50-4.49) category. Findings of this study concur with that of Okoye (2017) which revealed that the use of computer simulation and computer-assisted instruction are effective strategies for teaching entrepreneurship. Okoye further stated that the appropriate use of ICT in instruction enables business teachers to equip students with the right skills required for entrepreneurship business. Ejinkeonye and Chukwuone (2014) agreed that the use of ICT should be emphasized in teaching

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entrepreneurship because it is an effective strategy for equipping students with entrepreneurial skills for self-reliance on graduation.

The fact that all the listed items on the use of ICT teaching strategies were either rated very highly effective or highly effective is not surprising considering the impact of ICT in the field of entrepreneurship education at both tertiary and secondary school levels. According to Okoro (2013), ICT facilitates interaction between business subject teachers and students, enhances effective storage of business information, and facilitates the retrieval of business information. Nwaukwa (2015) in support stated that effective integration of ICT in the teaching of business subjects (entrepreneurship subjects inclusive) enables business subjects teachers to teach students with basic ICT skills so as to prepare them to live fulfilled and productive lives in a knowledge-based society. Nwaukwa further stated that ICT is imperative in the teaching of entrepreneurship as a subject and also enables business subject teachers to equip students with appropriate skills for future jobs.

Similarly, the findings of the study regarding the first and second hypotheses revealed that gender and ownership of school did not influence business teachers' mean ratings on information and communication technology strategies considered effective for teaching entrepreneurship. The findings of no gender influence agrees with that of Mathew (2010) which indicated that male and female teachers see the use of ICT as an effective strategy for teaching entrepreneurship as it helps in creating entrepreneurial intention among male and female students. Mathew furthers averred that ICT usage helps not only male students to become self-reliant upon graduation, but also equips female students to take part in today's business world on graduation. Mustafa (2014) in agreement stated that teachers, regardless of their gender are always keen to utilize new technologies in teaching in the hope that technology is an effective strategy to overcome the problems encountered in teaching. However, Hafkin (2012) disagreed by revealing that the effectiveness of ICT as a teaching strategy is viewed differently by males and females. Hafkin stated that males viewed the use of ICT as an effective strategy in teaching and learning more than the females. The author pointed out that there are substantial differences between women and men in access to and impact of the use of ICT in teaching and learning.

Regarding ownership of schools, the finding corroborates that of Lalitha and Prasad (2014) which revealed that ownership of schools (that is, public schools versus private schools) has no impact on teachers' usage of ICT as effective strategies for teaching entrepreneurship as a subjects in secondary schools. However, Malero, Ismail and Manyilizu (2015) reported that there is a relationship between the types of school with the readiness to adopt the use of ICT as an important strategy in teaching with private school being favoured. Malero et al. revealed that teachers in private secondary schools considered the use of ICT as effective teaching strategies more than their counterparts in public secondary schools because private schools have more teachers with ICT basic skills, more functioning ICT materials and conducive teaching /learning environment compared to their public schools counterparts.

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Thefindings of the study regarding the second research question showed that business subjects teachers considered school-industrial collaboration strategy highly effective for teaching entrepreneurship education in secondary schools in Anambra State. The findings of this study are in agreement with that of Jimoh, Maigida and Adebayo (2014) which revealed that maintaining school-industrial partnership can help in improving the delivery of vocational and technical education at both secondary and tertiary education levels. In line with this, Odu (2010) revealed that good school-industry collaboration will lead to effective entrepreneurship education. Similarly, Okolocha and Ile (2012) revealed that business educators strongly perceived school-industrial collaboration in teaching entrepreneurship to students effective. Okolocha and Ile stated that, the greatest strengths of using industrial collaboration as a strategy for teaching entrepreneurship lies in helping students to appreciate what is learned in the classroom.

According to Okolocha and Ibik (2014), school-industrial collaboration can help bridge the gap between the theory and practice of allied discipline in Nigerian schools, and achieve its mandate initiated Nigerian version of linkage program between schools and industries. This supports the earlier assertion of Alagbe (2007) that an effective school-industrial partnership can act as a stimulating factor in making students' practical experiences real and meaningful. Since entrepreneurship education exists to serve the industry, it is therefore, necessary that a high degree of linkage be developed and maintained between entrepreneurship education and industry. Effective linkage could force both industry and vocational education institutions to share their needs, problems, issues, strengths and weaknesses encountered in producing competent and quality entrepreneurial education students that will meet the demands of the industries, labour markets and society generally (Okolocha & Ile, 2012). Odu (2010) opined that the issue of making skills training and acquisition meaningful and relevant to the needs of the individual and the society will remain a mirage without good school-industry linkage.

Similarly, the test of the third and fourth hypotheses revealed that gender and ownership of school did not influence business subjects teachers' mean ratings on the effectiveness of school-industrial collaboration strategies for teaching entrepreneurship. The finding of no gender influence disagrees with that of Okolocha and Ibik (2014) which revealed that gender has a significant effect on respondents' opinions. Regarding the findings on school ownership, Okolocha and Ile (2012) revealed that business educators regardless of where they are teaching did not differ significantly in their perception of the strengths of school-industrial partnership as a strategy for teaching entrepreneurship education.

Conclusion

The success of teaching and learning of entrepreneurship is very important because of its ability to produce human capital for self and national development. Thus, the success of teaching and learning process here depends on effective strategies employed by the teachers during lesson delivery. Business subject teachers should therefore employ the use of ICT and school-industrial partnership strategies to facilitate students' skills for self reliance and employability after graduation.

Recommendations

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

- 1. Proprietors of private secondary schools should seek the help of nongovernmental organizations (NGOs) and other private individuals in areas of provision of ICT facilities and other infrastructures to improve the teaching and learning of entrepreneurship in their schools. This is because, ICT resources are expensive to acquire, and cannot be left in the hands of private school owners.
- 2. The Anambra State government should provide funds for the organization of regular training and retraining programmes for business subject teachers both in public and private secondary schools to enable them update their ICT skills so as to utilize new technologies for instructional purposes.
- 3. The State Ministry of Education should set up a framework to review current entrepreneurship studies curricula in secondary schools to incorporate the use of ICT facilities and practical-based teaching strategies to enhance the delivery of entrepreneurship studies.
- 4. School Administrators in both public and private secondary schools should partner with industries in areas of workshops, conferences; tours, exchange programmes, classroom visits, workplace visits, guest speakers, seminars and presentations. This will boost the teaching of entrepreneurship studies in secondary schools.

References

- Ajagbe, A. M. (2014). Funding criteria in technology based firms. (*Doctoral Degree Project*), Universiti Teknologi Malaysia.
- Alagbe, O. K. (2007). Strategies for cooperation between industries and technical institutions in Lagos State. Unpublished PG/MED thesis, University of Nigeria, Nsukka.
- Ejinkeonye, U. B. 1. & Chukwuone, C. A. (2014). Strategies for fostering entrepreneurship education in home economics at secondary school level In Anambra State, Nigeria. *Journal of Education and Practice*, 5(19), 51-55.
- Elechi, O. C. (2009). Expanding education and diminishing learning: A case for entrepreneurship for enterprise-readiness and employability of the products of the Nigeria education system. Unpublished paper.

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Strategies Considered Effective for Teaching Entrepreneurship ...

- Hafkin, N. (2012). Gender, information technology, and developing countries: an analytic study. Office of women in development, Bureau for global programs.
- Hennessy, S., Onguko, B., Harrison, D., Ang'ondi, E. K., Namalefe, S., Naseem, A. & Wamakote, L. (2010).Developing the use of information and communication technology to enhance teaching and learning in East African Schools: Review of the Literature. Centre for Commonwealth Education & Aga Khan University Institute for Educational Development – Eastern Africa. India, Brighton: ALINE IDS
- Jimoh, J. A. Maigida, J. A. & Adebayo, S. A. (2013).Strategies for improving schoolindustry relations for effective work preparation of automomobile technology students in the technical institutions in Lagos State. *Review of Education Institute of Education Journal*, 23(1), 137-155.
- Kabeer, N. (2009) Building livelihoods and empowering women: A case study of PRADAN,
- Lalitha, P. & Prasad, S. N. V. (2014). Factors influencing the usage of ICT in secondary schools: A case study in Telangana State of India.
- Malero, A., Ismail, A. & Manyilizu, M. (2015). ICT usage readiness for private and public secondary schools in Tanzania, A case of dodoma municipality. *International Journal* of Computer Applications, 129(3), 2013–2016.
- Mathew, V. (2010). Women entrepreneurship in Middle East: Understanding barriers and use of ICT for entrepreneurship development. *International Entrepreneurship and Management Journal*, 6(2), 163-181.
- Mustafa, M. N. (2014). The Effects of gender differences in ICT application: Bridging the gap of knowledge and skills among teachers. *Australian Journal of Basic and Applied Sciences*, 8(10), 81-86.
- Nwaukwa, F. C. (2015). Extent of integration of information and communication technology in instructional delivery by secondary school business subjects teachers in Abia State. (*Unpublished masters thesis*), Nnamdi Azikiwe University, Awka.
- Odu, K.O. (2010). School- industry link in entrepreneurship in vocational technical education in the face of global economic crises in Nigeria. *Unizik Orient Journal of Education*. 5(2), 8-14.
- Ofoha, D. (2011). 'Assessment of the implementation of the secondary skill based curriculum to youth empowerment in Nigeria'. *Edo Journal of Counselling*, 4(1) 1-7.
- Ofsted, C. (2011). Economic business and enterprise education.Educationperenterprise.EKi.nz.defining education for enterprise.HMINo.100086.w.w.w.

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- Ogundipe, K. N. (2012). Benefits and challenges of entrepreneurship education in secondary schools in Nigeria. (*An Unpublished Dissertation*), National Open University of Nigeria (NOUN) for the Award of Post Graduate Diploma in Education.
- Okolocha, C. C. &Ibik, H. I. (2014). Supervisors' rating of strategies for improving schoolindustry linkages in vocational education in tertiary institutions in Anambra State. *International Journal of Business & Management*, 2(4), 133-138
- Okolocha, C. C. & Ile, C. M. (2014). Strengths of the business plan and industrial collaboration strategies in the teaching of entrepreneurship in tertiary institutions. *Business Education Journal*, 8(1), 257 260.
- Okoye, A. C. (2017), Strategies considered effective by business educators for teaching entrepreneurship education in tertiary institutions in Anambra State. *International Journal of Social Sciences and Humanities Reviews*, 7(1), 65 71.
- Onele, A. A. & Nwite, O. (2011).*Creating effective entrepreneurial skills in secondary* school students through entrepreneurship education for sustainable development. A paper presented at 24th annual conference of curriculum organization of Nigeria, Benue State University.
- Onele, N., Bubou, G. M. & Okrigwe, F. N. (2011).Fostering technological entrepreneurship for socioeconomic development: A case for technology incubation in Bayelsa State, Nigeria.Journal of Sustainable Development, 4(6), 1-12.
- Onuka, P.C. (2008). Entrepreneurship education in schools. Aba; Linco Publishers.
- Orji, P.O. (2015). Strategies considered effective by business subject teachers for teaching entrepreneurship education at senior secondary schools level in Anambra State. *Unpublished PG/M.Sc. Thesis*.Nnamdi Azikiwe University Awka.
- Ukor, C. A. (2009). Assessment of required ICT skills for business centre performance. Auchi Journal of Office Technology and Management studies. School of Business Studies, Auchi Polytechnic Auchi.
- Wall, E.E. (2015).Gender: the sate of being male or female. *Neth Hearth Journals*, 23(9) 405-406. www.ncbi.nim.nih.gov.
- Yusuf, J. T. (2011). Strategies for promoting entrepreneurship skills acquisition at senior secondary school level in Nigeria. Being a paper presented at the 24th Annual Confrence of Curriculum Organization of Nigeria, Benue State University.

PERCEPTION OF SMEs MANAGERS IN ANAMBRA STATE ON THE EXTENT EMPLOYEES' PARTICIPATION IN DECISION MAKING IMPROVE THEIR WORK PERFORMANCE

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Abstract

This study ascertained the perceptions of small and medium scale enterprises managers in Anambra State on the extent employees' participation in decision making improved their work performance. Two research questions guided the study while four null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted for the study. The population of the study comprised 1124 managers of small and medium scale enterprises in Anambra State and a sample of 225 managers of small and medium scale enterprises in the Anambra State was selected through stratified simple random sampling technique. A 25-item validated questionnaire titled Questionnaire on Contributions of Employees' Participation in Decision-Making and Organizational Performance (QCEPDMOP) was used for data collection. The questionnaire was structured on a 5-point likert scale. Test re-test was used for reliability. Pearson Product Moment Correlation was used to analyze the data to obtain reliability coefficient of 0.93 and 0.85 for clusters B_1 and B_2 respectively with overall reliability coefficient of 0.89. Out of the 225 copies of the questionnaire distributed, 209 were retrieved and used for data analysis. Mean, standard deviation, t-test and ANOVA were used for data analysis. Findings of the study revealed that employees' participation in decision making improves their commitment and effective management of resources to a high extent. Also, that gender and years of experience did not affect employees' participation in decision-making. Based on the findings, managers of SMEs in Anambra State should strive to bring in competent employees to the enterprise for effective management of the organization. **Keywords:** Employees participation, decision making, SMEs and work performance.

Introduction

Small and Medium Scale Enterprises (SMEs) have been recognized globally as the engine of economic growth and development. SMEs contribute to improved living standards, substantial local capital formation, and high levels of productivity and capability for individuals and nations. SMEs are recognized as the principal

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means of achieving equitable and sustainable industrial diversification and dispersal (Olowe, Moradeyo & Babalola, 2013). According to Oguntolu (2008), small and medium scale enterprises (SMEs) are business organizations set up by individuals or group of individuals known as business operators for the main purpose of providing goods and services. Their classification into small and medium enterprises depends on the scale/size of business these business 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.

Small and Medium-scale Enterprises (SMEs) make up the largest proportion of businesses all over the world and play tremendous roles in employment generation as well as immensely contributing to the Gross Domestic Products (GDP) of many countries (Paul, 2010; Ojeka & Mukoro, 2011). SMEs are very important in many countries including Nigeria because of their role in economic development. The impact of small and medium scale enterprises (SMEs) in any economy is so great that most countries cannot progress economically and industrially without a strong SME sub-sector. Ayozie and Latinwo (2010) outlined the contributions of SMEs to include employment generation, poverty alleviation, utilization of local raw materials, entrepreneurship development, food security, rapid industrialization, reduction of rural-urban migration and increase in the revenue base of government. These contributions are feasible under an effective system which includes good human resource management practices.

Though SMEs are making positive contributions to economic growth and development in Nigeria, the rate of failure is high. According to West and Wood (2012), 90 percent of all business failures result from lack of experience and competence. West and Wood also added that inefficiency in overall business management and poor record keeping is a major feature of most SMEs; technical problems/competence and lack of essential and required expertise in production, procurement, maintenance, marketing and finances have always led to funds misappropriation, wrong and costly decision making. In today's rapidly changing business environment, small and medium scale enterprises are forced to find ways of being more competitive, flexible, and adaptive. To survive and compete in this globalized world, SMEs are required to gain maximum benefits from employees' participation in decision making. Therefore, employees are seen to be critical important assets in today's organizations than ever before (David in Shaed, Ishak & Ramli, 2015) and their participation in decision making is crucial in the workplace. The participation of employees describes the involvement of employee in decision making which is concerned with shared decision making in the work situation (Prvulovic, 2009).

Employees' participation in decision making involves the process of sharing important information between managers and employees to generate new ideas and possible alternatives, plan processes and evaluate results to achieve an organization's

objectives (Scott-Ladd, Travaglione & Marshall, 2006). Beardwell and Claydon (2007) defined employee participation as the distribution of power between employer and employee in decision making processes, either through direct or indirect involvement. Employee participation in decision making encourages the involvement of manpower at all levels of an organization to analyze problems, develop new strategies, and implements solutions (Helms, 2006). Effective participation provides opportunity in order to share information about how to evaluate customers, solve problems and generate new ideas for employees (Cheung &To, 2010). However, in Nigeria, the institutionalization of employees participation in decision-making in SMEs has been championed by several scholars such as (Adewumi, 2007; Imaga, 2010) who suggested that worker participation in management decision making will reduce industrial conflicts, raise employee commitment and effective resources management.

Employee commitment reflects the extent to which employees identify with an organization and is committed to its goals. Biljana (2004) stated that the commitment of employees is an important issue because it may be used to predict employees performance, absenteeism and other behaviors. The importance of employee commitment in an organization can never be over-emphasized, Steer (2008) observed that employee commitment is the congruence between the goals of the individual and the organization whereby the individual testifies with and extends effort on behalf of the general goals of the organization. Steer further opined that employee participation is a psychological state that characterizes the employee's relationships with the organization and have implications for the decision to continue membership in the organization management.

The management of an organization is considered efficient if it is able to coordinate the various resources (time and equipment) in such a way that they contribute maximally towards the realization of common objectives. Materials may be purchased at most competitive prices and machine may be worked to their full capacity but the out-put cannot be maximized without the participation of the workers (Mayer & Allen, 2012). Human factor is able to give an output far greater than its input only because of its ability to cooperate, coordinate, and integrate an organization at productivity. Involving employees in decision-making will lead to effective management of organization's resources.

Gender is one variable that could easily influence employees' participation in decision-making in business organizations which could in turn influence organizational performance. Gender in this study refers to the sex of an individual employees (either male or female). Gender in effect is determined by the conception of tasks, functions and roles attributed to women and men in the society and in public and private life. This is supported by Eni (2010) who reported that gender effect could be a factor in determining employees' participation in decision-making in SMEs in Anambra State. Since gender could influence the extent employees

participate in decision-making which could on the long-run influence organizational, considering it in this study will yield positive result.

Years of experience could also be another variable that could influence the extent employees participate in decision-making in organizations. Years of experience in this study refers to the field of knowledge acquired over months or years of actual practice and which, presumably, has resulted in superior understanding or mastery. Similarly, the experience of the manager is also an influencing factor. Sandra (2014) stated that experience is the process of personally observing, encountering, or undergoing something. It is possible that successful SMEs are handled by experienced managers who personally observe the day to day activities of their enterprises and also involve the employees in decision making process to increase productivity.

Statement of the Problem

Employees are important elements in the accomplishment of organizational goals and survival. Poor performance, low productivity and even extinction of organizations have become endemic in Nigeria and other developing nations of the world as a result of management decision (Onuoha, 2012). Specifically, the failure of management of organizations to recognize the human element in industrial production through greater involvement of employees in decision-making leads to serious industrial crisis and poor organizational performance. Many organizations have experienced lack of commitment by employees towards the implementation of decisions taken by top management which undoubtedly has serious repercussions on organizational success. Employees' non participation in the organization results to conflict between management and employees and also leads to indifference to the decision making reached by the organization. In such circumstances employees naturally do not fully and effectively utilize their potential rather they engage in negative behaviours like absenteeism, apathy and low commitment which ultimately negate the performance and productivity of the organizations. The problem of this study is that it appears that managers of SMEs in Anambra State are not aware of the positive contributions of involving employees in decision making on the performance and productivity of their enterprises. It is for this reason that many SMEs are employing methods to participate in decision making process. Hence the need for the study on perceptions of small and medium scale enterprises managers in Anambra State on the extent employees' participation in decision making improve their work performance.

Purpose of the Study

The main purpose of this study was to ascertain the perceptions of small and medium scale enterprises managers in Anambra State on the extent employees' participation in decision making improve their work performance. Specifically, the study determined the perceptions of SMEs managers in Anambra State on the extent employees' participation in decision making improve their:

- 1. Commitment
- 2. Management of resources

Research Questions

The following research questions guided the study.

In the perception of SMEs managers' in Anambra State:

- 1. To what extent does employees' participation in decision-making improve their commitment?
- 2. To what extent does employees' participation in decision-making improve their management of resources?

Hypotheses

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

- 1. There is no significant difference in the mean perception of male and female SMEs managers in Anambra State on the extent employees' participation in decision-making improve their commitment.
- 2. There is no significant difference in the mean perception of SMEs managers in Anambra State on the extent employees' participation in decision-making improve their commitment based on years of experience.
- 3. Male and female SMEs managers in Anambra State do not differ significantly in their mean perception on the extent employees' participation in decisionmaking improve their management of resources.
- 4. Experience does not influence the mean perception of SMEs' managers in Anambra State on the extent employees' participation in decision-making improve their management of resources.

Method

A descriptive survey research design was used for the study. This design was considered appropriate for this study because the study sought the opinions of managers on the contributions of employees' participation in decision making to the performance of small and medium scale enterprises. This study was carried out in Anambra State using 1124 managers of all registered SMEs in the State. A sample size of 225 SMEs managers representing 20 percent of SMEs in Anambra State was used for the study. The stratified random sampling technique was used. Instrument for data collection was a structured questionnaire. The face and content validity of the instrument was established using the opinions of three experts. To ascertain the consistency of the instrument, test re-test reliability was utilized. Data collected were using Pearson Product Moment Correlation. The computation showed that the clusters achieved co-efficient values of 0.93 and 0.85 for the clusters with an overall coefficient of 0.89 which the researchers consider high enough to judge the instrument as reliable for the study.

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The researchers, with the help of three research assistants distributed copies of the questionnaire. Out of the 225 copies of the questionnaire administered, 209 were returned 92.89% return rate. Data relative to the research questions were analyzed using mean and standard deviation to answer the research questions and determine the spread of the respondents means while t-test and ANOVA were used to test the hypotheses at 0.05 level of significance. Statistical Package for Social Sciences (SPSS) version 21 was used in the analysis of data. Item and cluster means was used to take decisions on research questions based on the boundary limits of numbers. In testing the hypotheses, where the p-value was less than the significance level of 0.05, it meant that there was a significant difference and the hypothesis was rejected. Conversely, where the p-value was no significant difference and the hypothesis was not rejected.

Results

Table 1: Respondents mean perception on the extent employees' participation in decision making improve their commitment. N = 209

S/No	Employee Commitment	Mean	SD	Decision
1.	Willingness to accept			
	responsibilities	4.37	0.62	High extent
2.	Punctuality to work	4.29	0.60	High extent
3.	Regularity to work	4.28	0.65	High extent
4.	Taking work home when the			
	need arises	4.25	0.62	High extent
5.	Work at weekends and public			
	holidays	4.16	0.66	High extent
6.	Putting extra hours when the			
	need arises	4.11	0.75	High extent
7.	Respect to supervisors	4.05	0.79	High extent
8.	Willingness to lend helping			
	hands whenever there is need	4.05	0.68	High extent
9.	Work with little or no			
	supervision	4.00	0.61	High extent
10.	Loyalty to the employer	4.00	0.60	High extent
11.	Not grudging when pay is			
	delayed for cogent reasons	3.95	0.80	High extent
12.	Compliance to rules and			
	regulations	3.93	0.57	High extent
13.	Volunteer to take extra tasks	3.89	0.77	High extent
14.	Readiness to work in teams	3.87	0.70	High extent
15.	Readiness to deliver tasks on			-
	schedule	3.51	0.68	High extent
		121		

4.05	High extent

Result in Table 1 shows that the cluster mean of 4.05 indicates that the respondents viewed employee participation in decision-making to contribute to workers' commitment in organization to a high extent. The item by item analysis shows that all the items with the mean scores ranging from 3.51 to 4.37 indicates that employees' participation in decision making improve their commitment in the organization to a high extent. The standard deviation showed homogeneity in SMEs managers' responses indicating greater consensus of opinion.

Table 2: Respondents mean perception on the extent employees' participation in decision making improve their management of resources. N = 209

S/No	Management of resources	Mean	SD	Decision
1.	Compliance with required			
	conditions for use of equipment	4.24	0.64	High extent
2.	Accurate recording of financial			
	transactions	4.15	0.64	High extent
3.	Watchfulness on movement of work			
	tools	4.13	0.63	High extent
4.	Avoid area of waste of consumable			
	materials	4.13	0.70	High extent
5.	Judicious use of funds	4.07	0.64	High extent
6.	Care of the work environment	4.07	0.68	High extent
7.	Taking measures to protect work			
	tools from loss and damage	3.94	0.58	High extent
8.	Accurate recording of stock	3.92	0.73	High extent
9.	Care of equipment and machines	3.92	0.60	High extent
		4.06		High extent

Result in Table 2 shows that all the items with the mean scores ranging from 3.92 to 4. 24 revealing that the respondents perceived employees' participation in decision making to improve their effective management of resources in organizations to a high extent. The cluster mean of 4.06 indicates that the respondents viewed employee participation in decision-making to contribute to effective management of resources in organizations to a high extent. The standard deviation showed that there is homogeneity amongst responses indicating a greater consensus of opinions.

Table 3: t-test comparison of the mean perception of male and female SMEs managers in Anambra State on the extent employees' participation in decision making improve their commitment

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Employees' commitment	Ν	\overline{X}	SD	Df	P-value	Decision
Male	168	4.05	.17			
				207	.453	Not
Female	119	4.04	.19			Significant

Result in Table 3 shows that there is no significant difference in the mean perception of male and female SMEs managers in Anambra State on the extent employees' participation in decision-making improve their commitment in organizations. This is shown by the p-value of 0.453, which is greater than the significant level of 0.05. This shows that there is no significance difference in the mean responses of SMEs managers. Therefore, the null hypothesis of no significant difference between the two groups is not rejected.

Table 4: Analysis of variance on mean perception of the respondents on the extent employees' participation in decision-making improve their commitment based on years of experience.

Sum o	of Squares	df	Mean Square F	P-va	alue
Between Groups	.026	2	.013	.401	.670
Within Groups9.226	206		.032		
Total	9.252	208			

As shown in Table 4 there is no significant difference among the three groups in terms of their mean perception on the extent employees' participation in decisionmaking improve their commitment based on years of experience (0-5 years, 6-10 years and 11 years and above), as the F-ratio (2, 206) was 0.401 and P-value (0.67) was greater than the stipulated 0.05 level of significance. Therefore the null hypothesis is not rejected.

Table 5: t-test comparison of the mean perception of male and female SMEs managers in Anambra State on the extent employees' participation in decision making improve their management of resources

Management	Ν	\overline{X}	SD		P-value	Decision
of resource				Df		
Male	168	4.05	.16			
				207	.297	Not
Female	119	4.08	.16			Significant

The t-test analysis in Table 5 shows that male and female SMEs managers in Anambra State do not differ significantly in their mean perception on the extent employees' participation in decision-making improve their management of resources. This is shown by the p-value of 0.297, which is greater than the significant level of 0.05. The null hypothesis of no significant difference between the two groups therefore is not rejected.

Table 6: Analysis of variance on mean perception of the respondents on the extent employees' participation in decision-making improve their management of resources based on years of experience.

Sum o	of Squares	df	Mean Square F	P-va	lue	
Between Groups	.023	2	.011	.452	.637	
Within Groups7.213 Total	206 7.236	208	.025			

Result in Table 6 shows that there is no significant difference among the three groups in terms of their mean perception on the extent employees' participation in decision-making improve their management of resources based on years of experience (0-5 years, 6-10 years and 11 years and above), as the F-ratio (2, 206) was 0.452 and P-value (0.637) is greater than the stipulated 0.05 level of significance. Therefore the null hypothesis is not rejected.

Discussion

The results of the study indicated that male and female SMEs managers' in Anambra State rated the extent employees' participation in decision making improve their commitment to a high extent. The findings are similar with the findings of Addulai and Shafuwa (2014) who reported that employees' participation in decision making increases commitment and satisfaction on decisions taken and also increases employees morale since they feel recognized as part of the team in the organization. This is in line with Ijeomah (2012) who stated that employee commitment impacts heavily on the organization's productivity and that the major contributory factor to organizational performance is employee participation in decision-making.

The test of the first hypothesis indicated that there was no significant difference in the mean ratings of male and female SMEs managers in Anambra State on the extent employees' participation in decision-making improved their commitment. Also, the second hypothesis revealed that there was no significant difference in the mean ratings of SMEs managers in Anambra State on the extent employees' participation in decision-making improved their commitment based on years of experience. This disagrees with the findings of Kuye and Sulaimon (2011)

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that a statistically significant relationship between employee involvement in decision making and firms' performance as well as reveal a significant difference between the performance of firms whose employee involvement in decision making are deep and the performance of firms whose employee involvement in decision making are shallow. This was also supported by the findings of Muflin, and Jawarneh (2011) which showed that there was no significant difference between male and female employees and their years of experience on the extent at which they participate in decision-making in organization.

The results of the study revealed that male and female SMEs managers' in Anambra State rated the extent employees' participation in decision making improve their management of resources to a high extent. This corroborates that of Ojokuku and Sajuyigbe (2013) who reported that effective management of resources is a fundamental strategy for SMEs desiring to improve organizational performance. In support of this Kavon-Linga (2015) observed that human resource management affected employees' performance most in the SME's managed by women. From Kavon-Linga's finding, difference exists as a result of gender, therefore, the study is in disagreement with this present study.

The results of the third hypothesis indicated that male and female SMEs managers in Anambra State did not differ significantly in their mean ratings on the extent employees' participation in decision-making improved their management of resources. Also the fourth hypothesis stated that experience did not influence the mean ratings of SMEs' managers in Anambra State on the extent employees' participation in decision-making improve their management of resources. This disagrees with the findings of Ojokuku and Sajuyigbe (2013) who observed that effective management of resources in organizations had significant positive impact on performance of SMEs.

Conclusion

Based on the findings of the study, it was concluded that participation in decision-making enhances commitment of workers and effective management of resources. It was also affirmed from the findings that gender and years of experience do not affect employees' participation in management decision-making.

Recommendations

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

1. Managers of SMEs' in Anambra State should embark on capacity building of their members to ensure better understanding of the relevance of employee participation in decision-making to organizational growth and performance. This can be achieved by collaborative efforts with the relevant educational institutions, government agencies and consultants through seminars, workshop, conferences and training programmes for both the managers and employees of the organizations.

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- 2. Managers of SMEs in Anambra State should embrace employee participation in decision-making to enhance product quality improvement. This is possible through recognizing and welcoming ideas of employees.
- 3. Managers of SMEs in Anambra State should give preferences to their employees. This is possible through the formulation of appropriate policies and regulations concerning employees' welfares as it will lead to good relationship between the organization and her customers.

References

- Adewumi, F. (2007). Industrial relations economic development and democracy: A preliminary note, E.F. Osuji Challenges facing industrial relation in Nigeria in the context of emerging new economic and political order (Department of Adult Education University of Ibadan).
- Ayozie, D. O., & Latinwo, H. K. (2010). Entrepreneurial development and small scale industry contribution to Nigerian national development. A marketing interface. *Information Management and Business Review*, 1(2), 51-68.
- Beardwell, J., & Claydon, T. (2007). *Human resource management: A contemporary approach*. Pearson Education
- Biljana, D. (2004). Employee commitment in times of radical organizational changes. *Economics and Organization*, 2(2), 111-117.
- Cheung, M. F. Y., &To ,W. M. (2010). Management commitment to service quality and organizational outcomes. *Managing Service Quality*, 20 (3), 259–272.
- Helms, M. M. (2006). Theory X and theory Y encyclopedia of management education, from http://www.enotes.com/managementencyclopedia/theory-x-theoryy%5bAccessed 12 January 2013].
- Imaga, E. U. L. (2010). Workers' participation in management in Nigeria: An empirical investigation. *India Journal of Industrial Relations*, 3(1), 52-62.
- Kuyea, O. L., & Sulaimon, A. A. (2011). Employee involvement in decision making and firms performance in the manufacturing sector in Nigeria. Serbian Journal of Management, 6(11), 1-15.
- Mayer, J. P. & Allen, N. J. (2012). Commitment to organizations and occupations: Extension and test of three-component conceptualization, *Journal of Applied Psychology*, 78,538551

Dr. C. M. Ile & Ogazie B. K.

- Oguntolu, T. A. (2008). Extent of utilization of information and communication technology (ICT) in small and medium enterprises in Ogun State. *Unpublished M.Sc project*, university of Nigeria, Nsukka.
- Ojeka, A., & Mukoro, O. O. (2011). International financial reporting standard (IFRS) and SMEs in Nigeria: Perceptions of academic. *International Journal of Research in Commerce & Management*, 2(I), 13-20
- Olowe, F.T., Moradeyo, O. A., &Babalola, O. A. (2013). Empirical study of the impact of microfinance bank on small and medium growth in Nigeria. International *Journal of Academic Research in Economics and Management Sciences*, 2 (6), 116-127
- Onuoha, B. C. (2012). The environment of manufacturing sector in Nigeria. Strategies towards vision 20:2020. *International Business and Management*, 5(1), 54-56.
- Paul, P. (2010). Direction of standards for SMES: IFRS for SMEs. *International Accounting Standards Board Review*, 2, 3-5.
- Prvulovic, S. (2009).Developing motivational model as a strategy for HRM in small enterprises under transitional economy.*Serbian Journal of Management, 4(1):* 1-27.http://business.mapsofindia.com/bpo-services-india/role-indias-economic-growth.html
- Shaed, M. M., Ishak, S., & Ramli, Z. (2015). Employees' participation in decision making: A literature survey. Online Malaysian Journal of Society and Space, 11(13), 142-155.
- Scott-Ladd, B., Travaglione, A., & Marshall, V. (2006).Causal inferences between participation in decision making, task attributes, work effort, rewards, job satisfaction and commitment.Leadership & Organization Development Journal 27(5), 399-414.
- Steers, R. M. (2008). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22(1), 46-56.
- West; D & Wood, G. (2012). Financial management. U.S.A. Hayuton Muffin Company.

EXTENT OF MENTORING SERVICES PROVIDED FOR PROFESSIONAL GROWTH OF BUSINESS EDUCATORS IN TERTIARY INSTITUTIONS IN SOUTH EAST, NIGERIA.

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Abstract

This study sought to determine the extent of provision of mentoring services for the professional growth of business educators in tertiary institutions in South East, Nigeria. One research question guided the study and one null hypothesis was tested at 0.05 level of significance. Descriptive survey research design was employed for the study. The population consisted of 188 business educators of colleges of education and universities in South East, Nigeria. There was no sampling as the entire The instrument for data collection was a structured population was studied. questionnaire titled "Mentoring Services for Professional Growth of Business Educators Questionnaire" (MSPGBEQ). The instrument was validated by three experts.Method of internal consistency was used to determine the reliability of the instrument using Cronbach Alpha with SPSS and reliability coefficient of 0.79 was obtained. The data collected were analyzed using descriptive statistics of mean and standard deviation in answering the research question and inferential statistic of ztest for testing the null hypothesis. Data analysis revealed that academic mentoring services were provided at a low extent. The result also revealed that gender was not a significant factor influencing the extent academic mentoring services were provided for business educators' professional growth in tertiary institutions in South East, Nigeria. Based on the findings of this study, it was concluded that the provision of mentoring services for business educators' professional growth in South East, Nigeria was inadequate and it was recommended among others that institutions and departments should endeavour to engage the services of research institutions and individual researchers in human resources development for the purpose of acquainting business educators with various mentoring services that would enhance business educators' professional growth.

Key words: Mentoring Services, Professional Growth, Business Educators and Tertiary Institutions.

Introduction

Education lies in the heart of every society. It is a key and vital element in the broad development of a nation's capacity to address and solve problems. Education forms the basis for the proactive and positive economic, social and political changes in the society. This is because it remains the key to empowerment of the people and the nation as a whole (Olawolu & Kaegon, 2012). The Federal Republic of Nigeria (FRN, 2014) stated that education is an instrument par excellence for effecting

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national development. Thus, the FRN outlined in her national policy on education, the cardinal aims of education which include among others is the development of the intellectual capacity of individuals to understand and appreciate their environment, and the acquisition of both physical and intellectual skills which will enable individuals to develop into useful members of the community. These skills could undoubtedly be acquired through various educational institutions including the tertiary institutions.

Tertiary institutions are institutions of higher learning like universities, colleges of education, polytechnics and monotechnics, where degrees and corresponding higher academic qualifications are awarded after an individual passes through rigorous moral and academic training. These tertiary institutions have the aims of awarding higher degree as well as other goals through teaching, research, development, generation and dissemination of knowledge so as to empower the populace. One way to empower individual in the country through education is by exposing the youth to the rudiments of skill acquisition, knowledge and competence which can be obtained through business education programmes offered in tertiary institutions.

Business education is an educational programme which involves the knowledge competences acquisition of skills, and which make the recipients/beneficiaries proficient in business skills/endeavours (Aquah, 2014). It is an umbrella under which all business programmes such as marketing, business administration, office technology and management and accounting take a shield. Business education as a discipline is expected to expose its recipients to diverse curricula contents, hence, it is that type of education that inculcates in its recipients attitudes, knowledge, skills and values that are required in the business world (Baugh & Sullivan, 2005). It is a means of producing a healthy, literate, self-reliant citizenry that would create wealth for human development, when they become self-employed.

Business education is aimed at providing individuals with the knowledge, skills and attitude needed to take up readily available job openings in the global job market. To achieve these aims, the educational system must function optimally and the teachers be professionally equipped to provide the requisite knowledge, skills and attitude that will enable the individuals avail themselves of the job openings and opportunities in the global market. It is against this background that Acquah (2014) lamented that the world has undoubtedly become a global village and the present economic realities and technological advancement in education has made the teaching profession a herculean task. To this note, there is the need to ensure professional growth of teachers, business educators inclusive.

Teacher professional growth according to Glatthorn in Olawolu and Kaegon (2012) broadly refers to the growth that a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically. Olawolu and Kaegon further noted that professional growth includes both formal and informal experiences. The formal experiences include activities such as attending workshops

and professional meetings, mentoring and so on. Informal experiences on the other hand relate to reading professional publications, watching television documentaries related to an academic discipline and so on. It refers to skills and knowledge attained for both personal and career advancement of an individual. Undoubtedly, for business educators to maintain a continuous growth in their profession, they must undertake a lot of effective professional activities either individually or in groups through professional growth strategies including study groups, peer-coaching, action research, mentoring, teaching portfolios, team teaching, and in-service training (Okurame, 2008). One way of ensuring professional growth of business educators is through mentoring.

Mentoring is a process where one person (a mentor) offers help, guidance, advise (counsels) and support to facilitate learning and (professional) development of another person (mentee or protégée) (Olorunleke, 2015). Smith (2007) defined mentoring as a particular mode of learning wherein the mentor not only supports the mentee, but also challenges them productively so that progress is made. However, Fairbanks, Freedman and Kahn in Olorunleke defined mentoring in teacher education as complex social interactions that mentor teachers and student-teachers' construct and negotiate for a variety of professional purposes and in response to the contextual factors they encounter.

In this study, mentoring refers to the act of professional support (knowledge, psychological and social support) experienced between or among business educators. It involves an experienced business educator giving professional support to a less experienced business educator. It is a formal programme whereby a senior business educator, that is the mentor, take the responsibility of mentoring, advising, counseling and giving help to a junior colleague in so as to help the mentee grow in the profession. Mentoring in business education is a carefully planned programmed which focused on developing the mentees capacity by transmitting in him, knowledge, self-confidence and experiences required for professional growth. It provides the mentee with improved self-confidence, increased personal support, improved effectiveness and awareness of the philosophy of business education which help the mentee in career development and professional growth. Okurame (2008) identified four basic dimensions of mentoring services which include academic, psychological, social and guidance mentoring services. This study focused exclusively on academic mentoring services. This is in view of the fact that the crux of mentoring in teacher education is to enhance the professional growth of the educators which would on the long-run improve the professional performance of the educators and students' academic achievements as well.

The purpose of academic mentoring of staff is to enhance the quality of human capital for maximum capacity utilization within and outside the tertiary institution community. Tertiary institutions are committed to a working environment where professional improvement is seen as a continuous process which enables all members

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of staff to develop their professional skills and effectiveness in support of the goals and priorities of the institutions (Megbo & Akor, 2015). Every institution should recognize the value of staff development to the achievement of academic excellence for the efficient and effective operation of the institution. This equally applies to the work, career and personal development of individual members of staff.

Staff academic development includes everything that is done to warrant and extend the knowledge and skills of academic staff so that they can contribute fully towards the achievement of the mission and vision of the institution. Academic staff development supports the personal and professional improvement of academic staff as well as the organizational development needs of the university. Successful programme implementation in universities depends on individual and collective operational capacities of academic and non-academic staff of the universities.

Gender is a variable that could easily influence the extent of provision of mentoring services for professional growth of business educators. In the context of this study, gender refers to the roles and responsibilities of men and women that are created in families, societies and cultures. The concept of gender also includes the expectations held about the characteristics, aptitudes and behaviours of both men and women (masculinity and feminity). Gender in its narrowest sense means socially constructed sex roles of male or female. Consequently, there might be differences in male and female rating on issue concerning the extent of mentoring services on professional growth of business educators. This is partly as a product or outcome of gender roles and orientation in social construction of the environment in which they belong to.

Although, findings on the relevance of mentoring for employee development are mainly from industry, they are no less important in the academia (Payne, 2006). However, despite considerable empirical support for the importance of mentoring in the professional development of individuals and the quest for the latter among Nigerian academia, the dearth of empirical exploration of mentoring activities subsists. The extent of mentoring services provided for the professional growth of business educators in tertiary institutions in South East of Nigeria remains unclear.

Statement of the Problem

The issue of mentoring in tertiary institutions has been worrisome to stakeholders (including Business Educators). A conversation with most business educators seem to reveal that many of them are not unlocking their potentials as a result of lack of mentoring. This could be that those that are supposed to mentor them are saddled with too many responsibilities. This therefore could affect the educators in teaching. Many stakeholders feel that the issue of mentoring in business education are neglected and therefore could affect the objective of her graduates. This is seen with the unemployment among graduates in Nigeria. One begins to wonder if mentoring of business educators could affect their professional growth and the discharge of their duties.

Supporting the above observation, Okurame (2014) reported that one of the major problems in the school system today is lack of progressive teachers' professional growth. This according to Okurame is attributed to inadequate provision of mentoring services arising from the inability of the teachers to perceive its relevance to their professional growth. In fact, the poor provision of mentoring services would impact negatively on the professional growth of business educators. These negative effects could be reflected among business educators in the areas of poor quality teaching, poor quality of research and publications, inappropriate use of students' assessment procedures, inability of keeping abreast with emerging issues in business education and so on. Undoubtedly, similar situation may be obtainable among business educators in tertiary institutions in South-east, Nigeria. The present researcher is worried by this disturbing situation because of its effects on the professional growth of business educators in tertiary institutions in South East, Nigeria. It appears that the extent of mentoring services provided for professional growth of these business educators is inadequate and if an empirical study of this nature is not carried to investigate the actual situation, the goals of business education programmes in tertiary institutions in the area may not be achieved. This study thus became imperative as it x-rayed the actual situation in the area so as to proffer dependable solutions.

Purpose of the Study

The main purpose of this study was to determine the extent mentoring services are provided for the professional growth of business educators in tertiary institutions in South East, Nigeria. Specifically, the study determined the extent to which:

1. academic mentoring services are provided for professional growth of business educators in tertiary institutions in South East States of Nigeria.

Research Question

The research question below guided the study:

1) To what extent are academic mentoring services provided for the professional growth of business educators in tertiary institutions in South East Nigeria?

Hypotheses

The null hypothesis below was tested at 0.05 level of significance:

1. There is no significant difference in the mean scores of male and female business educators on the extent to which academic mentoring services are provided for their professional growth in tertiary institutions in South East Nigeria.

Method

The study adopted the descriptive survey research design. The population of this study consisted of 188 (78 male and 110 female) business educators from 16

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tertiary institutions (seven colleges of education and nine universities) in South East Nigeria that offer business education courses. The instrument for data collection in this study was a structured questionnaire titled "Mentoring Services for the Professional Growth of Business Educators Questionnaire "(MSPGBEQ). The instrument was structured on a five- point response option of very high extent (VHE), high extent (HE), moderate extent (ME), low extent (LE) and very low extent (VLE). Face validity of the instrument was established using the opinion of three experts. To establish the internal consistency of the items in the instrument, the Cronbach Alpha formula was used to analyze the data and a reliability coefficient value of 0.79 was obtained.

Out of the 188 copies of the instrument distributed, only 182 (96%) copies were retrieved from the respondents and were used for data analysis.

In order to determine the extent of provision of academic mentoring services for professional growth of business educators, a decision rule based on mean ratings between 4.50-5.00 were regarded as very high extent, items with mean ratings of 3.50-4.49 were considered as high extent and items with 2.50-3.49 were regarded as moderate extent. Furthermore, items with mean ratings of 1.50-2.49 and 0.50-1.49 were considered as low extent and very low extent respectively. In testing the null hypothesis, where the z-calculated value was less than the z-critical table value, the null hypothesis was accepted. Conversely, where the z-calculated was greater than or equal to the z-critical table value, the hypothesis was rejected.

Results

Research Question

To what extent are academic mentoring services provided for the professional growth of business educators in tertiary institutions in South East Nigeria?

Table 1			
N	 	 	C 41

professional growth of business educators in te S/NAcademic services provided	rtiary ii π	nstitutio SD	ons. N = 182 Remarks
 encouragementof business educatorstoattend professional conferences 	1.56	.46	Low Extent
2. granting of study leaves	1.53	.40	Low Extent
3. sponsoring of research and academic publications	1.70	.46	Low Extent
3. organization of in-service workshops and seminars	2.70	.46	Moderate Extent
 organization of induction/ orientation for new staff 	1.53	.53	Low Extent
5. staff for ICT trainings	1.73	.46	Low Extent
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6.	professionaldevelopment	2.80		
	programmes in research		.40	
	methodology and pedagogy			Moderate Extent
7.	training of staff on the usage of mode	el 2.50	.50	
	instructional facilities			Moderate Extent
	Cluster Mean		2.01	Low Extent

Information in Table 1 shows that item numbers 4, 7, and 8 have mean scores ranging from 2.50 to 2.70 showing that business educators are moderately provided with academic services for their professional growth, while items 1, 2, 3, 5, and 6 have mean scores ranging from 1.53 to 1.73 showing that academic mentoring services are provided at low extent. The standard deviations of 0.40 to 0.53 show that business educators are not different in their responses which indicate homogeneity. The cluster mean score of 2.01 shows that academic mentoring services for professional growth of business educators in tertiary institutions in South East Nigeria are provided at low extent.

Testing of Hypothesis

Hypothesis

There is no significant difference in the mean ratings of male and female business educators on the extent to which academic mentoring services are provided for their professional growth in tertiary institutions in South East Nigeria.

Table 2

Z-test comparison of the mean ratings of male and female business educators on the extent to which academic mentoring services are provided for their professional growth in tertiary institutions. N=182

Gender	$\frac{N}{\overline{X}}$	SD	α Df	z-cal	z-crit	Decision
Male	70	.12				
	3.50		0.05	1.43	1.96	Not
Female		.13	180			Significant
	112					U
	3.52					

Data in Table 7 show that the z-cal value of 1.43 is less than the critical value of 1.96 at 180 degree of freedom and at 0.05 level of significance. Thus, the null hypothesis of no significant difference between the two groups is not rejected. This implies that male and female business educators do not differ significantly in their mean ratings on the extent to which academic services are provided for their professional growth in tertiary institutions in South East Nigeria.

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Discussion of Findings

The findings of the study revealed that academic mentoring services are provided for the professional growth of business educators in South-east, Nigeria to a low extent. The results revealed the major aspects of academic services which the respondents indicated that were provided for their professional growth to a low extent. These include encouragement and sponsoring of business educators for professional conferences, granting of study leaves, sponsoring of research and academic publications, organization of induction/orientation for new staff, sponsoring of staff for ICT trainings and so on. This finding is supported by Megbo and Akor (2015) who noted that provision of mentoring services among academic staff is essential for building work role effectiveness, career advancement, self-confidence and address other interpersonal concerns of the relationship.

This finding disagreed with Eyitayo, Bamidele and Aremu (2015) who carried out a study to assess the perception of developmental impact of mentoring by academic staff of the Obafemi Awolowo University. The findings of the study showed that 86.5% of academic staff were involved in academic mentoring relationship and 93.5% of academic staff had favourable perception of mentoring. This finding also corroborates the conclusion of Aladejana, Aladejana and Ehindero (2006) and implies a tendency for mentor to enjoy in carrier development function which facilitates academic advancement.

The findings of the study also revealed that male and female business educators did not differ significantly in their mean ratings on the extent to which academic services are provided for their professional growth in tertiary institutions in South East Nigeria. This is in agreement with Okurame (2014) whose study revealed no significant difference in the opinions of the respondents on the extent of provision of academic mentoring services on the basis of gender. This implies that academic staff who are senior members irrespective of their gender share resources and utilize mentoring opportunities by making personal decisions and conscious effort to establish a link with potential mentees. There is no doubt that the provision of these academic services would enable business educators to be fully competent and completely equipped to discharge their professional duties as required.

Conclusion

Based on the findings of this study, it was concluded that provision of mentoring services is essential for enhancing professional growth of business educators. The study however concluded that the provision of academic mentoring services provided for professional growth of business educators in tertiary institutions in South-east, Nigeria is inadequate. The professional growth of business educators can only be achieved through adequate provision of academic mentoring services.

Recommendations

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

Exten of Mentoring Services Provided for Professional Growth ...

- 1. The Nigeria government (federal and state) should establish a mentoring programme office as a department in the Ministry of Education. The department should be saddled with the task of coordinating and evaluating the program and ensuring that mentoring services are provided in various tertiary institutions across the country.
- 2. Institutions and departments should endeavour to engage the services of research institutions and individual researchers in human resources development for the purpose of acquainting business educators with various mentoring services that would enhance business educators' professional growth.
- 3. Administrators of universities and colleges of education and heads of departments of business education programme should endeavour to mentor their staff (both old and new) to aid their professional growth and to avoid stagnation and burn out. This can be done via induction programmes, workshops and public enlightenment programmes.
- 4. Workshops and seminars should be regularly organized for business educators so as to enable them see the need to provide for themselves various mentoring services to aid their professional growth.

References

- Aladejana, A., Aladejana, F. &Ehindero, S. (2006). An Analysis of mentoring relationships among teachers: A case study of Obafemi Awolowo university, Ile-Ife, Nigeria. *International Journal of Evidence Based Coaching and Mentoring*, 4(1), 20-30.
- Aquah, P.A. (2014). Enriching the business education curriculum for relevance in the global workforce. *Global Journal of Human-Social Science: Linguistics & Education*, 14(7), 30-35.
- Baugh, S. G. & Sullivan, S. E. (2005).Mentoring and career development, Career Development International, 10(6/7), 423–428.
- Eyitayo, A., Bamidele, U. C., & Aremu, M. A. (2015). Assessment of the perception of developmental impact of mentoring by academic staff of the Obafemi Awolowo University. *International Journal of Knowledge Management and Innovation*, 8(2), 101-119.
- Federal Republic of Nigeria (2014). *National policy on education*. Lagos: NERDC Press.
- Megbo, B. C. & Akor, I. A. (2015). Mentoring as staff development strategy for effective programme implementation in Nigerian universities. *International Journal of Multidisciplinary Research and Development*, 2(3), 367-371.

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- Okurame, D. E. (2008). Perceived mentoring functions: Does mentor's gender matter? *Women in Management Review*, 22(5), 418-427.
- Okurame, D.E. (2014). Mentoring in the Nigerian academia: Experiences and challenges. *International Journal of Evidence Based Coaching and Mentoring*, 6(2), 45-56
- Olawolu, O.E. & Kaegon, L.E.S. (2012).Entrepreneurship education as tool for youth empowerment through higher education for global workplace in Rivers. A paper presented at the Seventh Regional Conference on Higher Education for a Globalized world organized by the Higher Education Research and Policy Network (HERPNET): holding at the University of Ibadan, Ibadan Nigeria between the 17th to 21st September, 2012.
- Olorunleke, G. K. (2015). Mentoring as a competency tool for the development of the university teaching staff- A case study of Adekunle Ajasin University Akungba Akoko.*International Journal of Academic Research in Business and Social Sciences*, 5(6), 277-288.
- Payne, S. (2006). Mentoring a smart business decision, research shows. Retrieved 15th March 2012 from http://communications.tamu.edu/newsarchives/05/020705-10.html
- Smith, A. (2007). Mentoring for experienced school principals: Professional learning in a safe place.*Mentoring and Tutoring* 15(3), 277-291.

ADEQUACY OF INFRASTRUCTURAL FACILITIES FOR SKILL **ACQUISITION IN ENTREPRENEURSHIP DEVELOPMENT CENTRES IN TERTIARY INSTITUTIONS IN ENUGU STATE**

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Abstract

Graduate unemployment is a serious problem facing the Nigerian society for several years. This became a topical issue in the national discourse on how to come out of the problem. The quest to proffer solution to the problem of graduate unemployment gave way for the introduction of entrepreneurship education in tertiary institutions in Nigeria. Entrepreneurship education is an educational programme that creates awareness of entrepreneurship as a career option to enhance the understanding of the process involved in initiating and managing a new business enterprise. To achieve this at the entrepreneurship development centres, infrastructural facilities for skill acquisition at the centres should be adequate for effective entrepreneurial skills acquisition among undergraduates. This study determined the adequacy of infrastructural facilities for skill acquisition in entrepreneurship development centres in tertiary institutions in Enugu State. The study was a descriptive survey carried out with 39 management staff of entrepreneurship development centres and 98 entrepreneurship lecturers in tertiary institutions in Enugu State. One research question guided the study and two null hypotheses were tested at 0.05 level of significance. A validated structured questionnaire was used to collect data for the study. The reliability of the instrument was established using Cronbach Alpha which yielded the coefficient value of 0.73. Mean and standard deviation were used to analyze data to answer the research questions, z-test and ANOVA to test the null hypotheses. The findings of the study revealed among others that there are inadequate infrastructural facilities for skill acquisition in entrepreneurship development centres in tertiary institutions in Enugu State. It was recommended among others that the management of tertiary institutions in Enugu State should source for fund beyond government budgetary allocations through internal generated revenues and external grants to ensure adequate provision of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres.

Key Words: Adequacy, Infrastructural facilities, Skill Acquisition, Entrepreneurship Development Centres and Tertiary Institutions.

Introduction

The need for adequate provision of infrastructural facilities at the Entrepreneurship Development Centres is imperative to enhance training on skills acquisition among tertiary institutions undergraduates. Infrastructural facilities are the physical structures provided in an academic environment to give conducive atmosphere that support teaching, learning and training processes (Twiggs, 2014). Infrastructural facilities in Entrepreneurship Development Centres consist of a hall, classrooms, seminar rooms, lecturers/staff offices, laboratory block, furniture facilities and toilet facilities. Observation shows that these facilities are not adequate in our tertiary institutions (Izuagba & Enwereuzo, 2010). The population explosion in the tertiary institutions has resulted in over-crowding of the classrooms. In most cases, the laboratories and libraries are not functional. Where they are functional, they are equipped with outdated textbooks and other obsolete equipment (Anioke, 2011). The adequacy of infrastructural facilities do influence to a large extent, the quality of entrepreneurship skills acquisition programme provided. Adesina (2009) agreed that the adequacy of infrastructural facilities within an educational system has positive relationship with the standard and quality of educational system. According to Ikegwuani (2015), infrastructural facilities can be said to be the basic structure of entrepreneurship development centres in particular which is necessary for its operation. Jumbo and Nwokocha (2015) stated that infrastructural development is the basis for measuring the performance of entrepreneurship development centres in tertiary institutions and that it is the foundation of the good performance of any institution. It is the basis for measuring effectiveness of entrepreneurship programme of any institution. Okike and Abraham-Ibe (2015) agreed that infrastructural facilities are the basic necessities that should be put in place before other necessities could stand. These are physical structures required at the entrepreneurship development centres to enhance the process of learning entrepreneurship education/ training.

The infrastructural facilities are hall, classrooms, seminar rooms. lecturers/staff offices, furnitur, laboratory/workshop block, e-library block and toilet facilities (NUC, 2006). Akighgbe (2014) asserted that entrepreneurship development centres are facilities-based. Therefore the necessary facilities must be provided to realize the goals of improved quality in the centres. This will make graduates relevant and competent entrepreneurs. Onwukwe and Aliche (2012) alerted that where the facilities are inadequate, teaching and learning of entrepreneurship education/ training will hardly take place. Envekit and Envekit (2015) stressed that the adequacy of infrastructural facilities at the entrepreneurship development centres are important for the effective running of entrepreneurship education programme. Owoeye and Yara (2011) postulated that adequacy of infrastructural facilities are major determinant of positive learning outcomes in entrepreneurship education/ training. Enyekit, Amaehule, Onyeche and Enyekit (2011) articulated that infrastructural facilities apart from providing comfort to learning are equally essential for improving learning

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environment better performance. This means that the quality of entrepreneurship educational services provided at the entrepreneurship development centres is to a large extent, determined by the quality of the infrastructural facilities in the centres.

Adequate infrastructures promote good learning environment and support learners' interest. Ezeani (2012) affirmed that adequately infrastructured entrepreneurship development centre gives room for empowering of undergraduates with entrepreneurial skills, knowledge and values to perform specific functions within the spectrum of their training so as to become self-reliance. Igboke and Chinedu (2015) described entrepreneurship education as a practical oriented discipline that requires adequate educational infrastructures for effective implementation of the programme. To ensure optimum entrepreneurial training under the best of conditions, entrepreneurship development centres are expected to have good infrastructures adequately and sufficiently provided with requisite human resources and equipment (Enyekit & Enyekit, 2015). Ikegwuani (2015) pointed out that entrepreneurship education is a 'doing course' and so needs basic necessary infrastructures to facilitate acquisition of skills and competencies that benefit graduates. Twiggs (2014) stated that the nature of infrastructure needed at the entrepreneurship development centres are the infrastructures that promote learning because the face of infrastructure affects the learning environment. Inadequate infrastructure in the learning environment cannot promote good learning. Adequate infrastructures make for better performance. Since entrepreneurship education is skilled based orientated programme, there is need for adequate infrastructures for successful delivery of entrepreneurial skill and knowledge at the centre (Jumbo & Nwokocha, 2015).

Furthermore, the provision of adequate infrastructural facilities enable the entrepreneurship study learning environment to be amicable and interesting to achieve the expected outcomes. The effect of this will help in producing graduates who are efficient with entrepreneurial skills to set up successful business enterprises. This agrees with the highlight made by the Federal Republic of Nigeria (2004) which indicated that the quality of education that undergraduates receive bear direct relevance to the adequacy of school infrastructures and facilities in which learning takes place. This means that tertiary institutions must hold the adequate provision of infrastructural facilities at the entrepreneurship development centres to high esteem. In support of this, Enyekit, Onuekwu and Silas-Dikibo (2011) stated that need for infrastructural facilities are particularly greater in the running of entrepreneurship development centres in tertiary institutions. Enyekit and Enyekit (2015) in agreement stressed that the need for infrastructures at the entrepreneurship development centres is because entrepreneurship is a practical training programme. Enyekit and Enyekit further pointed out that the programme is aimed at achieving the primary goal of providing students with the necessary skills required to have a successful selfemployment on graduation. This means that adequate provision of infrastructures at the entrepreneurship development centres pave way for empowering the students with

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entrepreneurial knowledge, skills and attitude that promote problem-solving pedagogical approach among others which is a major source that provides conducivelearning environment. In support of the above, Igboke and Chinedu (2015) stressed that adequacy of entrepreneurship educational infrastructure significantly enhance students' entrepreneurial achievement in one way or the other. Owoeye and Yara in Onyesom, Egbule and Okwuokenye (2012) submitted that the smooth running of entrepreneurship development centres depends largely on the adequacy of infrastructures put in place at the centre.

However, provision of infrastructural facilities requires huge capital. This calls for the involvement and assistance of the Federal government, State government and agency like Tertiary Education Trust Fund (TETFund). The huge capital required for the provision of infrastructures entails while the basic infrastructural facilities needed to equip entrepreneurship development centres in some tertiary institutions are shortsupply or insufficient (Abdularim, 2011). Idialu in Okike and Abraham-Ibe (2015) maintained that inadequate infrastructural facilities could affect quality of teaching and learning. This means that quality of teaching and training in entrepreneurial skills diminishes when the infrastructural facilities required at the entrepreneurship development centres are inadequate. Anioke (2011) noted that even where the infrastructures are available, they are too few for students use. Corroborating with this view, Desai (2012) re-emphasized that inadequate entrepreneurship educational infrastructures at the centres have been a serious issue since the past few decades, even though governments have tried to reform the education sector to embrace the desired changes in the system, without much success. According to Igbuzor (2016) dilapidated buildings and inadequate educational facilities in some educational institutions are some of the major challenges facing entrepreneurship education achieving its major goals and objectives. Abdularim (2011) discovered that most of the facilities needed to equip students with basic entrepreneurial skills for selfreliance through entrepreneurship education training are not adequately provided in tertiary institutions. Jumbo and Nwokocha (2015) reported that inadequate provision and poor maintenance of infrastructures are regular features in our tertiary institutions. This underscores the need for proper planning and adequate budgeting to provide adequate infrastructural facilities in the tertiary institutions entrepreneurship development centres because of the increase in demand for education.

In spite of the importance of infrastructural facilities, there are challenges facing infrastructural development in our tertiary institutions. These include finance for development and maintenance. Others are quality requirements of projects to meet international standard and to be sustainably developed (Agoha, 2015). The adequacy of infrastructural development in our tertiary institutions directly affects the quality of entrepreneurship training given to the graduates. Akpan and Etor (2013) stressed that the quality of graduates produced in Nigeria for the past years were theoretical based. This is due to inadequate provision of entrepreneurial facilities required to equip them with entrepreneurial competence. The challenge of inability to demonstrate

entrepreneurial competence among graduates from tertiary institutions in Enugu State contributes to high rate of unemployment among tertiary institutions in the state. This could be attributed to inadequacy of basic infrastructures at the Entrepreneurship Development Centres (EDCs) for entrepreneurial skill training of students in tertiary institutions in Enugu State. Meanwhile, Ezeani (2012) pointed out that one of the proficient functions of entrepreneurship education is to produce graduate entrepreneurs who are to be more innovative, able to display self-confidence, and derive satisfaction in solving problems. To ensure high professional quality achievement in EDCs better performance on equipping students with necessary entrepreneurial skills for self employment requires adequate provision of infrastructural facilities at the centres.

Theoretical Framework

This study hinged on system resources organizational effectiveness theory. The system resources organizational effectiveness theory was propounded by Stanly and Ephraim in 1967. This theory demonstrates an organization's ability to secure an advantageous bargaining position in its environment and to capitalize on the position to acquire scarce and valued resources. The systems resources organizational effectiveness theorists viewed organizational effectiveness as synonymous with the organizations ability to secure scarce and valuable resources for her activities. In relating the theory to this study, tertiary institutions that establish entrepreneurship development centres are formal organizations with defined goals that the centres are to achieve. The achievement of these goals depends on the ability of the entrepreneurship development centres to secure adequate infrastructural facilities to ensure entrepreneurial skills acquisition by students. If infrastructural facilities for skill acquisition in entrepreneurship development centres in tertiary institutions in Enugu State are not adequate the centres cannot function effectively to achieve the goals of equipping students with entrepreneurial skill for self-independence. This means that inefficiency and ineffectiveness will become the order at the centres which will result in inability of the centres to stimulate entrepreneurial mindset in the students and equip them with skills for entrepreneurial endeavours on graduation.

Research Question

How adequate are infrastructural facilities for skill acquisition in entrepreneurship development centres in tertiary institutions in Enugu State?

Research Hypotheses

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

1. Respondents from federal and state owned tertiary institutions in Enugu State do not differ significantly in their mean ratings on the adequacy of infrastructural facilities for skill acquisition in their entrepreneurship development centres.

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2. Respondents do not differ significantly in their mean ratings on the adequacy of infrastructural facilities for skill acquisition in entrepreneurship development centres in tertiary institutions in Enugu State based on institution type.

Method

The design adopted for the study was a descriptive survey research design. The population comprised 39 management staff of Entrepreneurship Development Centres and 98 entrepreneurship lecturers in the tertiary institutions in Enugu State. The instrument used to elicit response from the respondents was a validated structured questionnaire titled "Questionnaire on Adequacy of Infrastructural Facilities for Skill Acquisition in Entrepreneurship Development Centres" (QAIFSAEDCs). The questionnaire is structured on a five point rating scale of Very Adequate (VA), Adequate (A), Fairly Adequate (FA), Inadequate (IA), and Very Inadequate (VIA). Internal consistency of the instrument was checked by administering copies of the questionnaire on 20 respondents from tertiary institutions in Abia State. Cronbach alpha was used to analyze the data collected and a reliability coefficient of 0.73 was obtained. Copies of the research instrument were administered to the respondents by the researchers with the help of six research assistants who were selected from the tertiary institutions in Enugu State and briefed on the procedure. Out of the 137 copies of the questionnaire distributed, 120 of them represented 88 percent were retrieved and used for analysis.

Mean was used to analyze data related to the research question and standard deviation to determine the homogeneity or otherwise of the respondents' responses. Decision on the items was based on the real limit of numbers as follows:

Response Options	Rating	Boundary Limits
Very Adequate (VA)	5	4.50 - 5.00
Adequate (A)	4	3.50 - 4.49
Fairly Adequate (FA)	3	2.50 - 3.49
Inadequate (IA)	2	1.50 - 2.49
Very Inadequate (VIA)	1	0.50 - 1.49

z-test and analysis of variance (ANOVA) were used to test the null hypotheses at 0.05 level of significance. A hypothesis was not rejected where the calculated z or f-ratio is less than the critical z or f-ratio otherwise the hypothesis was rejected.

Results

Research Question: How adequate are infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions in Enugu State?

Data collected with the questionnaire on adequacy of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions in Enugu State were analysed descriptively and result shown in the table 1 below.

Table 1

Respondents' mean ratings on perceived adequacy of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions in Enugu State

=120			
NInfrastructural Facilities	MeanSD	Remarks	
Entrepreneurship Lecture Halls	1.64	0.48	Inadequate
Entrepreneurship Classroom Blocks	1.43	0.50	Very
Inadequate			-
Entrepreneurship Seminar-room Blocks	1.74	0.44	Inadequate
Staff Offices	2.40	0.50	Inadequate
Entrepreneurship Laboratory	2.32	0.46	Inadequate
Furniture Fittings Facilities	2.29	0.46	-
Inadequate			
Toilet Facilities	2.30	0.46	
Inadequate			
Cluster Mean	2.02		
	NInfrastructural Facilities Entrepreneurship Lecture Halls Entrepreneurship Classroom Blocks Inadequate Entrepreneurship Seminar-room Blocks Staff Offices Entrepreneurship Laboratory Furniture Fittings Facilities Inadequate Toilet Facilities Inadequate	NInfrastructural FacilitiesMeanSDEntrepreneurship Lecture Halls1.64Entrepreneurship Classroom Blocks1.43Inadequate1.64Entrepreneurship Seminar-room Blocks1.74Staff Offices2.40Entrepreneurship Laboratory2.32Furniture Fittings Facilities2.29Inadequate2.30Inadequate2.30	NInfrastructural FacilitiesMeanSDRemarksEntrepreneurship Lecture Halls1.640.48Entrepreneurship Classroom Blocks1.430.50InadequateEntrepreneurship Seminar-room Blocks1.740.44Staff Offices2.400.50Entrepreneurship Laboratory2.320.46Furniture Fittings Facilities2.290.46InadequateToilet Facilities2.300.46

Inadequate

Data contained in the table 1 shows that all the seven items rated on adequacy of infrastructural facilities were inadequate. Therefore, with a cluster mean of 2.02, it was affirmed that infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions in Enugu State are inadequate. The standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings.

Hypothesis 1.Respondents from federal and state owned tertiary institutions in Enugu State do not differ significantly in their mean ratings on the adequacy of infrastructural facilities for skill acquisition in their entrepreneurship development centres.

Hypothesis on adequacy of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres was tested at 0.05 level of significance based on institutions ownership and the result shown in table 2.

Table 2.

z-test analys	is of 1	respond	ents'm	ean ra	tings o	n percei	ved adequ	acy of
infrastructura	al facilit	ties for	skill acq	uisition	in Ent	repreneur	ship Devel	opment
Centres in ter	tiary in	stitution	is in Enu	igu Stat	e based o	on institut	tions owner	ship
Institution	Ν		X	SD	a	df	z-cal	z-crit
Remarks								
Federal	61	2.02	0.41					
				0.05	118	0.42	1.96	Not
Significant								
State	59	1.99	0.38					
				144				
NAU Jou	rnal of Tec	hnology &	· Vocationa	l Educatio	n Vol.3 No	.1 2018. All I	Rights Reserved	1.

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Data in table 2 shows that the z-value of 0.42 is less than the critical z-value of 1.96 (0.42 < 1.96) at 0.05 level of significance and 118 degree of freedom. This means that respondents from federal and state owned tertiary institutions in Enugu State do not differ significantly in their mean ratings on the adequacy of infrastructural facilities for skill acquisition in their Entrepreneurship Development Centres. Therefore, the null hypothesis is not rejected.

Hypothesis 2. Respondents do not differ significantly in their mean rating on adequacy of infrastructural facilities for skill acquisition in entrepreneurship development centres in tertiary institutions in Enugu State based on institution type.

Hypothesis on adequacy of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres was tested at 0.05 level of significance based on institutions type and the result shown in table 3.

Table 3.ANOVA summary of respondents' mean ratings on perceived adequacy of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions in Enugu State based on institutions type

		Sum of	Df	Mean	Fcal	Fcrit	Sig.
		Squares		Square			Remark
	Between	1.30	3	0.43	0.83	2.86	0.49
University on adequacy	Groups						
of Infrastructural	Within	18.71	54	0.52			
Facilities	Groups						
	Total	20.00	57				
	Between	0.66	3	0.22	0.50	2.86	0.69 NS
College of Education on	Groups						
adequacy of	Within	16.11	44	.45			
Infrastructural Facilities	Groups						
	Total	16.78	47				
	Between	1.50	3	0.50	1.12	2.86	0.36
Polytechnic on	Groups						
adequacy of	Within	16.10	13	0.45			
Infrastructural Facilities	Groups						
	Total	17.60	16				

Data in Table 3 shows that the calculated ANOVA values of 0.83, 0.49 and 1.12 for Universities, Colleges of Education and Polytechnics are less than the critical ANOVA value of 2.86 indicating that the respondents do not differ significantly in their mean ratings on the adequacy of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions in Enugu State based on institution type. Therefore, the hypothesis is not rejected.

Discussion of Findings

The findings of the study revealed that infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions in Enugu State are not adequate. This was shown by the cluster mean of 2.02 which fell under inadequate boundary limit of 1.50 - 2.49. The findings of this study is in line with that of Sopuruchi and Nnoka (2013) which reported that infrastructural facilities for teaching and learning entrepreneurship education were not adequate. They further stated that inadequacy of the infrastructural facilities affected the effectiveness in teaching and learning entrepreneurship education among tertiary institutions undergraduates. In agreement, Salami (2016) disclosed in a related study that infrastructural facilities needed for effective implementation of the entrepreneurship education programme in Kwara State were not adequate. In agreement, Nwokocha (2015) reported that inadequate provision and poor maintenance of infrastructures are regular features in our tertiary institutions. Ukaegbu (2015) in a related study disclosed that available infrastructures in college of education in Delta State were grossly inadequate for both students and lecturers. According to Igbuzor (2016) dilapidated buildings and inadequate educational facilities in some educational institutions were some of the major challenges facing entrepreneurship education achieving its major goals and objectives. This affected the transfer of knowledge and entrepreneurial skill in entrepreneurship development centres in tertiary institutions.

In addition, the result of the test of hypothesis showed that respondents in tertiary institutions in Enugu State do not differ significantly in their mean ratings on the adequacy of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres in tertiary institutions owned by federal and state governments in Enugu State. This concurred with the findings of Sopuruchi and Nnoka (2013) which revealed that institutions ownership did not differ significantly in their mean rating on adequacy of infrastructural facilities for teaching entrepreneurship education in universities in Imo State. Since entrepreneurs are the bed rock to the growth and development of any economy, the EDCs should be adequately provided with the basic infrastructures for the training of future-graduate entrepreneurs that will contribute to job creation and enhance economic viability of the state.

Conclusion

In the light of the findings of this study, it could be concluded that Entrepreneurship Development Centres in tertiary institutions in Enugu State do not have adequate infrastructural facilities for skill acquisition in entrepreneurship. Type and ownership of institutions did not influence the opinion of the respondents regarding the adequacy of infrastructural facilities for skill acquisition in the Entrepreneurship Development Centres. Efforts should be made to enhance the effectiveness of the centres for entrepreneurship skill acquisition among undergraduates. Nigeria is facing increased youth unemployment, enhancement of entrepreneurship development centres effectiveness through provision of requisite

resources at the centres will boost the acquisition of entrepreneurial skill among undergraduates who will venture into their own enterprises upon graduation for selfemployment and job creation in the country. This could be possible through the provision of adequate infrastructural facilities to remedy deficiencies in the EDCs in tertiary institutions in Enugu State.

Recommendations

Based on the findings and the conclusion reached in this study, the following recommendations are made:

- 1. The management of tertiary institutions in Enugu State should create room for the provision of infrastructural facilities such as entrepreneurship lecture halls, entrepreneurship classrooms blocks, entrepreneurship seminar-rooms block, and entrepreneurship laboratory facilities in their Entrepreneurship Development Centres. These will provide conducive learning environment for skill acquisition among the undergraduates.
- 2. The management of tertiary institutions in Enugu State should source for fund beyond government budgetary allocations through internal generated revenues and external grants to ensure adequate provision of infrastructural facilities for skill acquisition in Entrepreneurship Development Centres.

References

- Adesina, S. (2009). *Educational management*. Enugu: Fourth Dimension Publishing Company.
- Abdularim, M. (2011). Situational analysis of resources for implementing business studies curriculum of the universal basic education (UBE) programme in Onelga Local Government of Rivers State, Nigeria. *International Journal of Educational Development*, 13-54.
- Anioke, B.O. (2011). Problems and prospects of business education in Nigria.In C.E. Eze.Introduction to Vocational Education (New Edition). Enugu: Lady Star Printing Services.
- Agoha, C.G. (2015). The place of adequate skills and facilities for effective implementation and achievement of ICT and entrepreneurship education curriculum in business education in colleges of education, Kano State. *Association of Business Educators of Nigeria Book of Readings*, 3(1), 104-111.
- Akpan, C., & Etor, C. (2013). University lecturers' perception of entrepreneurship education as an employment strategy for graduate self-employment in southsouth Nigeria. *International Journal of Asia Social Science*, 3(5), 1180-1195.

NAU Journal of Technology & Vocational Education Vol.3 No.1 2018. All Rights Reserved. http://www.naujtved.com.nq

- Akighgbe, O.J. (2014). A survey of technical and vocational skills need by out of school youth in Edo north senatorial district. *Nigeria Journal of Business Education*,2(1).
- Desai, D. (2012). Education and infrastructures.Retrieved from www.concuringopinions.com/archives/2012/education-and-infras/.
- Enyekit, E.O. & Enyekit, K.E.O. (2015). Extent of availability of school plants and facilities for effective administration of business education programmes in tertiary institutions in Rivers State. *Nigerian Journal of Business Education*,2(2), 118-128.
- Enyekit, E.O., Onuekwa, F.A., & Silas-Dikibo, I.D. (2011).Extent of instructional materials usage and academics performance in shorthand of Office Technology and Management (OTM) students in tertiary institutions in Rivers State.*Journal of Pristine*,2(1), 143-149.
- Enyekit, E.O., Amaehule, S., Onyeche, C.N., & Enyekit, K.E.O. (2011). Vocational guidance and career development needs of undergraduate business education students in tertiary institutions in Rivers State. *Journal of the Association of Advancement of Knowledge*, 23(2), 123-129.
- Ephraim, Y. & Stanly E. S. (1967). A system resources approach to organization effectiveness. *American Sociological Review*, D01-10.2307/2092843.
- Ezeani, N.S. (2012). Application of entrepreneurship education: A panacea for effective secondary schools management in Nigeria. *Singaprean Journal of Business Economics and Management Studies*,1(5), 7-45.
- Federal Republic of Nigeria.(2004). National policy on education. Yaba Lagos: National Educational Research Development Press.
- Igboke, S.A., & Chinedu, O. (2015).Imperativeness of educational infrastructure in the production of competent business teachers.*Nigerian Journal of Business Education*,2(2), 151-158.
- Igbuzor, D.O. (2016). The state of education in Nigeria. A keynote address delivered at a round table conference organized by Civil Society Action Coalition on Education for All. Retrieved from http://dawodu.com/igbuzor14.htm.
- Ikegwuani, V.U. (2015). Availability and sustainability of infrastructural facilities for business studies in public and private secondary schools in Onitsha north and south

LGA of Anambra State, Nigeria. Nigerian Journal of Business Education, 2(2), 129-138.

- Izuagba, A.C., & Enwereuzo, N.M.C. (2010).Entrepreneurial skills in English language teacher education curriculum.*International Journal of Education Research*, 11(3), 172-179.
- Jumbo, P.O.A., & Nwokocha, E.G. (2015). Availability and adequacy of infrastructural facilities as panacea for the achievement of behavioural objective of business studies in Rivers State. *Nigerian Journal of Business Education*, 2(2), 139-150.
- Okike, O.N. & Abraham-Ibe, I.G. (2015). Challenges of infrastructural facilities to office technology and management education. *Nigerian Journal f Business Education*, 2(3), 253-258.
- Onwukwe, V.O. & Alice, K. (2012). The challenges of modern instructional facilities to office technology and management lecturers in Nigeria polytechnics. *Association of Business Educators of Nigeria Book of Reading*, 2(1), 196-203.
- Onyesom, M., Egbule, N.C., & Okwuokenye, A.E. (2012). Business education in Nigeria: Changes, challenges and chances. Association of Business Educators Nigeria Book of Reading, 2(1), 97-104.
- Owoeye, J.S., & Yara.(2011). School facilities and academic achievement of secondary school agricultural science in Ekiti State, Nigeria. Journal of Asian Social Science, 7(7), 64-74.
- Salami, L.O. (2016). Infrastructural needs assessment for effective implementation of entrepreneurship education programme in senior secondary schools in Kwara State. *Nigerian Journal of Business Education*, 3(1), 316-325.
- Sopuruchi, N.P., & Nnoka, U.E. (2013). Assessment of infrastructural facilities for teaching entrepreneurship education in universities in Imo State. *Journal of Business and Enterprise Development*, *4*, 591-611.
- Twiggs, C.A. (2014). The need for a national learning infrastructure. Retrieved from http:// www.infrastructualneed.net
- Ukaegbe, N.J. (2015). Adequacy and management of infrastructures in colleges of education, Delta State. *Journal of Enterprising Culture*, *15*(2), 121-130.
- National Universities Commission. (2006). Guidelines for the establishment of entrepreneurship development centres in universities. *Unpublished manuscript*..

EFFECT OF PROJECT TEACHING METHOD ON STUDENTS' ACADEMIC ACHIEVEMENT IN BUILDING/WOODWORK

TRADE IN OYO STATE GOVERNMENT TECHNICAL COLLEGES

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Abstract

Poor academic achievement of students in building/woodwork trade in Oyo State government technical colleges as a result of defects in demonstration method of teaching prompted the researchers to adopt project method as an alternative means to effective teaching and a way of replacing the old one. Two research questions and two hypotheses were postulated in line with the stated objectives. Quasi-experimental research design was adopted for the study. A sample of 78 building/woodwork trade year III students drawn by purposive sampling technique from a population of 250 students in five government technical colleges was used for the study. The instrument for data collection was a Building/Woodwork Trade Achievement Test (BWTAT) validated by three experts. Test-retest method was used to obtained reliability coefficient value of 0.76 through Person product moment correlation coefficient. The study revealed that project teaching method was more effective than conventional method in enhancing students' academic achievement in building/ woodwork trade. Also, it was found that project teaching method increases male academic achievement than female students in building/woodwork trade. Therefore, it was recommended that technical teachers should have workshop guidelines on how to use project method for practical skills on students. Also, technical teachers should ensure they plan their lessons with equal learning chances for both male and female students.

Keywords: Project Teaching Method, Academic Achievement, Building/Woodwork Tradeand Government Technical Colleges.

Introduction

Technical colleges are education learning centres which are charged with the responsibility of producing craftsmen and master craftsmen in various trades such as building/woodwork technology,electrical/electronicstechnology,automobile technology and mechanical technology (Federal Republic of Nigeria, 2013). The policy documented stated that the goals of establishing technical colleges among others include provision of trained manpower in the applied science, technology and business particularly at craft, advanced craft and technician levels. Therefore,

technical colleges can be referred to as training centers where necessary skills are imparted to individuals who can fit into the world of work and adapt to the latest technological tools thereby enabling them to be relevant and self-dependent/reliant.

The National Board for Technical Education (2014) listed the programmes in technical colleges to include building/woodwork trade which covers block laying, bricklaying and concreting, draftsmanship, craft practice, joinery and carpentry, furniture design and construction, machine woodworking, painting and decorating. Building/woodwork trade provides learners with the knowledge and practical skills required for a tradesperson in the world of work. The curriculum contents include various and general design of a building, woodworking machine, preparation of stock, principles of foundations and trusses among others. These organized bodies of knowledge are transferred to learners through various teaching methods employed by technical teachers.

Demonstration method of teaching also referred to as the traditional method commonly used by teachers in the teaching and learning process in technical colleges. Mellissa (2014) described demonstration teaching method as the process whereby an instructor stands before a class of students and presents organized body of knowledge or curriculum contents to them. Furthermore, Bundles (2016) added that it is a process of presenting spoken explanation of the subject to be learnt to the students. However, Ahmad and Aziz (2009), Umar (2013), Okwelle, Emeli and Hart (2016) in their different studies proved the method to be defective in enhancing students academic achievement in different school subjects including building/woodwork trade as the practical aspects will not be given due recognition and attention. This, therefore, highlights the need for a method that can be more effective in imparting the right and appropriate skills needed in the world of work to the building/woodwork students.

Project method is an instructional method in which students influence the activities, materials and pace of learning (Adamu, 2016). Project method also described as a learner-centered teaching method because it gives room for independent learning and critical or creative thinking directed towards solving identified problems. Therefore, with project method students are more active and motivated towards learning thereby increasing their class participation which could in turn increase their academic achievement.

According to Adamu (2016) academic achievement is the measure of what a person had accomplished after exposure to educational programme. Students academic achievement can be influenced by several factors such as learning environment, teaching methods and gender difference among others. Salami in Adamu (2016) posited that factors resulting from gender differences such as the rate of which male students learn practical skills may be different from the rate at which their female counterparts learn. Likewise, class size and arrangement can also contribute to the differences in students' academic achievement rate. However, a key factor in the teacher and the method of teaching used (Ahmad & Aziz 2009, Umar 2013, Okewelle, Emeli& Hart 2016). Since technical college students require

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appropriate skills for solving related problems in building/woodwork trade, there is need for teachers to adopt methods that will enhance their active participation. One of such methods is the project teaching method. The advantages attributed to project method of teaching prompted the researchers to investigate the effect of project teaching method on students' academic achievement in building/woodwork trade in Oyo State government technical colleges.

Statement of the Problem

Persistent poor academic achievement of students of technical colleges in Nigeria generally and Oyo State in particular has been attributed to various factors among which is method of teaching adopted by teachers. The demonstration teaching method which is mostly used in technical colleges has been associated with several defects such as students being passive in the teaching and learning process and poor academic achievement among others. The project teaching method provides an excellent opportunity for students to develop critical thinking and problem solving skills among others. Therefore, the problem of this study is that academic achievement of students of government technical colleges in Oyo State has been persistently poor and if the ugly trend is not reversed, it will retard the program of the State. It is assumed that the project teaching method will produce a better learning outcome for students in building/woodwork trade but this need to be determined empirically, hence the study on effect of project teaching method on students' academic achievement in building/woodwork trade in Oyo State government technical colleges.

Purpose of the Study

The main purpose of this study was to determine the effect of project teaching method on students' academic achievement in building/woodwork trade in Oyo State government technical colleges. Specifically, the study determined:

- 1. Mean gain academic achievement of students taught trusses using project method and those taught with demonstration method in Oyo State government technical colleges.
- 2. Interacting effect of gender and teaching methods on academic achievement of students in trusses in Oyo State government technical colleges.

Research Questions

The following research questions guided the study:

1. What is the mean gain academic achievement of students taught trusses using project method and those taught with demonstration method in Oyo State government technical colleges?

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2. What is the interacting effect of gender and teaching methods on academic achievement of students in trusses in Oyo State government technical colleges?

Hypotheses

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

- 1. There is no significant difference between mean gain academic achievement of students taught trusses using project method and those taught with demonstration method in Oyo state government technical colleges.
- 2. There is no significant difference between the mean gain in interacting effect of gender and teaching methods on academic achievement of students in trusses in Oyo State government technical colleges.

Method

The study employed the use of quasi-experimental design. Specifically, the pretest, posttest, non-equivalent control group design was adopted for the study. According to Afuwape, Afuwape and Adeagbo (2016), quasi-experimental design can be used in research when its involves selection of groups upon which a variable is tested without any random pre-selection process as well as with a variable being compared between different groups or over a period of time. The study investigated the effect of project teaching method on students' academic achievement in building/wood work trade in Oyo State technical colleges. This design was considered suitable for this study on effect of project teaching method on students' academic achievement in building/woodwork trade in Oyo State government technical colleges because intact classes and non-randomized groups were studied. The design is graphically presented as follows:

Group	Pretest	Treatment	Posttest
Experimental	01	Х	02
Control		X	O2

Where O1 = Pretest for both experimental and control groups

O2 = Posttest for both experimental and control groups

X = Treatment given to the experimental group (Project Method)

-X = No treatment given to the control group (Demonstration Method)

--- = Non-randomization

The population for this study consists of all 250 NTC III students (281 males and 73 females) of building/woodwork trade in the five government technical colleges in Oyo State. The information was obtained from the office of the director; Oyo State Ministry of Education, Science and Technology on 27th February, 2018. Trusses as a subject content was chosen because it is related to both building and woodwork trade and only NTC III curriculum content contains it. Purposive sampling technique was used for the selection of two technical colleges in the State, government technical

college, Awe, Oyo was used as experimental group to be taught Trusses with project method. While Government technical college, Iseyin was used as control group learning trusses with demonstration method. Experimental group consist of 43 (38 male and 5 female) students while control group consist of 35 (27 male and 8 female) students.

The instrument for data collection was a Building/Woodwork Trade Achievement Test (BWTAT) developed by the researchers based on the purpose of the study and literature reviewed. It contains 20 multiple-choice test items with four options. The face and content validity of the instrument was established by three experts from technical education department, Emmanuel Alayande College of Education, Oyo, Oyo State. They scrutinized the instrument to determine the relevance of the questionnaire items, their clarity and comprehensiveness. These were to ensure that the items strictly addressed the research questions raised for this study. The corrections were effected and incorporated into the final draft of the instrument. Test-retest method was used to determine the reliability of the instrument. BWTAT was administered to 15 NTC III students in Ijebu-Ode Government Technical College, Ijebu-Ode, Ogun State who were not part of the population of the study. After two weeks interval, it was administered to the same group and Person product moment correlation coefficient was used to obtain co-efficient value of 0.76 which was considered high enough to regard the instrument as reliable for the study (Afuwape, Afuwape & Adeagbo, 2016).

Experimental Procedure

The treatment procedures used for the study are as follows;

- 1. Permission was obtained from the two technical college principals involved in the study to carry out the research.
- 2. Pre-test was administered for both experimental and control groups.
- 3. The experimental group was taught the concept of Trusses using project method while the control group was taught the concept of Trusses using demonstration method.
- 4. The experiment lasted for two weeks. Errors made by students were corrected and necessary precautions were observed.
- 5. Post-test was administered for the two groups and the results were collected and recorded for analysis.

The pre-test scores for both experimental and control groups were collected and recorded. At the end of the treatment, post-test was administered to both experimental and control groups and the scores were collected and recorded. Mean (\overline{X}) and standard deviation were used to answer the research questions while t-test was used to test the null hypotheses at 0.05 level of significance. T-test was adopted based on the recommendation of Afuwape, Afuwape and Adeagbo (2016), that t-test can be use for comparing the means of two sample (or treatment) in a study.

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Results Research Question 1

Table1.Mean gain academic achievement of students taught trusses using project method and those taught with demonstration method in Oyo State government technical colleges.

Groups	Teachin	g	Numbe	r of	Pre-t	est]	Post-te	est	
	Method	S	respond	lents	\overline{X}	SD	\overline{X}		SD	\overline{X}
gain										
Experimental	PM	43		11.15	3.05	24.06		5.82		
Group										21.44
Control										
Group DM	[35		7.43	2.43	15.96	5	4.00			
Total			78		18.58	5.48	40.02		9.8	32
21.44						-				

PM- Project Method, DM- Demonstration Method, SD- Standard Deviation

Table 1 shows that the pre-test and post-test mean scores of students taught Trusses using PM and CM are 11.15; 24.06 and 7.43; 15.96 respectively. The mean gain was then calculated to be 21.44 to favour the experimental group. From this result, students of the experimental group performed better in the BWTAT than those in the control group. This shows that the project teaching method is much more effective than the demonstration method in enhancing students' academic achievement in building/woodwork trade in Oyo State government technical colleges. Also, standard deviation of pre-test and post-test of both experimental and control groups were 3.05; 5.82 and 2.43; 4.00 respectively, indicating that the respondents were not too far from one another in their responses, proving that the items were valid.

Research Question 2

Table 2. Mean gain interacting effect of gender and teaching methods on academic achievement of students in trusses in Oyo State government technical colleges.

Experimental group		Control group			
Gender Pre- test Post- test	t I	Pre	e-test Po	st-	
$\begin{array}{c} N \bar{x} SD \bar{x} SI \\ \bar{x} \text{ gain} \end{array}$	D \bar{x} Gain N	N $ar{x}$	SD \bar{x}	SD	
Male 38 5.02 2.53 13.21 4 6.28	4.72 8.19 2	27 3.44	1.02 9.72	3.27	
Female 05 4.43 2.00 6.43 5 3.10	5.21 2.00 (08 4.22	1.00 7.32	2.86	
Total 43 9.45 4.53 19.64 9 9.38	0.93 10.19	35 7.66	2.02 17.04	6.13	

PM- Project Method, DM- Demonstration Method, SD- Standard Deviation

Table 2 shows that male students taught Trusses with project method had pre and post-test mean scores of 5.02 and 13.21 with mean gain of 8.19. However, female students taught Trusses with project method had pre-test and post-test mean score of 4.43 and 6.43 with mean gain of 2.00. Also, male students taught Trusses with demonstration method had a pre-test and post-test mean score of 3.44 and 9.72 with mean gain of 6.28. Meanwhile, female students taught with demonstration method on Trusses had pre-test and post-test mean score of 4.22 and 7.32 with mean gain of 3.10. It was evident from the result that male students taught Trusses had higher mean score than their female counterparts. Hence, there is a gender influence on students' academic achievement in building/woodwork trade.

Hypothesis 1

Table 3: Independent sample t-test on the mean gain academic achievement of students taught trusses using project method and those taught with demonstration method in Oyo State government technical colleges.

Group	Ν	Mean	SD	Df	Alpha	t-cal	t-crit	Decision
Exp.	43	17.23	6.57	76	0.05	7.53	1.96	Significant
Cont.	35	10.68	4.29					

Table 4 shows the experimental and control groups mean score of 17.23 and 10.68 with standard deviation of 6.57 and 4.29 respectively. It also shows the observed t-calculated value of 7.53 and t- critical value of 1.96. The null-hypothesis is

thus rejected because there was a significant difference in the students' academic achievement taught trusses using project method and those taught with demonstration method in Oyo State government technical colleges.

Hypothesis 2

Table 4: Independent sample t-test on the mean gain between interacting effect of gender and teaching methods on academic achievement of students in trusses in Oyo State government technical colleges.

Gender	N	Mean	SD	Df	Alpha	t-cal	t-crit	Decision
Male	43	17.23	6.57	76	0.05	7.53	1.96	Significant
Female	35	10.68	4.29					

Table 5 shows the male and female mean score of 17.23 and 10.68 with standard deviation of 6.57 and 4.29 respectively. The table also revealed the t-calculated value of 7.53 and the t-critical value of 1.96. The null-hypothesis is hereby retained because there was significant difference in the extent to which gender difference affect the academic achievement of students taught trusses using project method in Oyo State government technical colleges.

Discussion

Based on the result findings, it was evident that the students taught trusses with project method performed better than those taught with the demonstration method. This is supported by Umar (2013) who posited that project method assist learners for self and intellectual development. Okewelle, Emeli and Hart, (2016) also added that project method proffer the learners with the opportunity of critical thinking and problem solving ability.

Result also revealed that male students taught trusses had higher mean score than their female counterparts. Therefore, with the adoption of project method there is a gender influence on students' academic achievement in building/woodwork trade. This result was similar with the findings of Umar (2013) and Adamu (2016) who posited that male students perform better with project method than their female counterparts.

Conclusion

The study investigated the effect of project teaching method on students' academic achievement in building/woodwork trade in Oyo State government technical colleges. It was evident from the result that students taught trusses with project method perform better than those taught with the demonstration method. Also, with the adoption of project method there is a gender influence on students' academic achievement in building/woodwork trade in Oyo State technical colleges favoring the male students.

Recommendations

Based on the findings and conclusion of the study the following recommendations were proffered;

- 1. Technical teachers should adopt project method for teaching building/woodwork technology curriculum contents to increase students participation in the teaching learning process as this improve their academic achievement.
- 2. Building/woodwork teachers should ensure they plan their lessons using project method with equal gender learning chances to increase female students academic achievement.

References

- Adamu, Y. (2016). Effect of project method on performance of students in social studies in junior secondary schools in Jigawa State, Nigeria.A masters' dissertation submitted to the school of postgraduate studies, Ahmadu Bello University, Zaria.
- Afuwape, M. A., Afuwape, F. A. & Adeagbo, I. F. (2016). *Research project writing explained*. Lucky Odoni (Nig.) Enterprises: Ijebu-Ode, Ogun State.
- Ahmad, F. & Aziz, J. (2009). Students' perception of their teachers' teaching of literature communicating and understanding through the eyes of the audience. *European Journal of Social Science*, 7(3), 12-26.
- Bundles, T. (2016).Effective Teaching Strategies.Retrieved from http://www.boundless//index.php
- Federal Republic of Nigeria (2013).*National policy on education*.6th Edition. Lagos: Nigerian Educational Research and Development Council (NERDC).
- Melissa, K. (2014). Lecture as a teaching Method. Retrieved from http://www.education%20lecture%20teaching%20method
- National Board for Technical Education (NBTE, 2014).*National technical certificate* examination (craft level) syllabus for engineering trades based on the NBTE modular curricular. Kaduna: Author
- Okwelle, P. C., Emeli, E. & Hart, T. U. (2016).Effect of group project method on student's academic achievement in car battery system in basic technology.*International Journal of Advanced Academic Research, Sciences, Technology & Engineering.* 2. (8), 1–9.
- Umar, I. (2013). Project method of teaching study lecture.Retrieved from http://www.studylecturenotes%20project%20method

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EFFECTS OF COOPERATIVE LEARNING METHOD ON ACADEMIC ACHIEVEMENT AND RETENTION OF STUDENTS IN BASIC TECHNOLOGY IN OYO STATE

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Abstract

This study was necessitated by persistent declining in the academic achievement in Basic Technology in public examinations by junior secondary school students. The study determined the effects of cooperative learning method (CLM) on academic achievement and retention in Basic Technology in Oyo State. Three research questions guided the study and three null hypotheses were tested at 0.05 level of significance. The population of the study was 19,892 JSS II Basic Technology students in Oyo State. The purposive sampling technique was used to select 114 students for the study. Pre-test, Post-test and non-equivalent group quasi-experimental research design was used for the study and the instrument for data collection was Basic Technology Achievement Test (BTAT) which was validated by three experts. A reliability correlation coefficient of 0.82 was obtained for the test items using test retest and Pearson Product Moment Correlation. Mean was used to analyse data relating to the research questions while analysis of covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance. Findings revealed that students taught Basic Technology using CLM performed better with higher post-test scores than those taught using conventional teaching method (CTM). Findings also indicated that retention mean score of students taught Basic Technology using CLM was higher than those taught using CTM, both high and low achieving students were favoured by the use of CLM but low achieving students were slightly favoured by the use of CLM but low achieving students were slightly favoured more. The interaction effect of teaching methods and gender was not significant on students' academic achievement and retention in Basic Technology. Hence, it was recommended among others that school administrators should provide opportunities for in-service training for Basic Technology teachers in order to equip them with competencies needed in the use of CLM for teaching the subject.

Keywords: Cooperative learning, achievement, retention, Oyo State

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Introduction

In a developing country like Nigeria, there is need for efficient and welltrained individuals who would be able to cater for themselves and participate productively in the development of the society. From the ancient societies to modern nations, education proved to be a most potent tool for survival, growth and development. Agbatogun (2010) conceived education as a systematic action of imparting knowledge, skills and habits to the learners in their preparation for meaningful life and contribution to better society.

Education according to Lawal (2013) is the act of giving knowledge to or developing the abilities of people by teaching, training or schooling. It is an instrument for helping both individuals and society to re-orient themselves towards more positive beneficial and more productive services. Eze (2013) affirmed that education, particularly technical vocational education and training is a veritable tool for achieving the much needed economic and technological development. it is a fulcrum on which all other developmental facets are hinged.

Technical and Vocational Education and Training is the process of acquiring knowledge, skills, attitudes, interests, abilities, competencies, and norms of a society by people to enhance perpetual development. In order to achieve this, the individual is exposed to different learning experiences ranging from individual's culture, polity, knowledge, management, partnership, negotiation, communication and information technology skill. It is in recognition of the importance of education that Nigeria has continue to make serious efforts towards providing the citizens with quality and functional education for social, economic and political development. In making effort towards qualitative and functional education, the Federal Republic of Nigeria (2013) in her National Policy on Education stated that one of the aims and objectives of education in Nigeria is to help the child acquire appropriate productive skills, abilities and competencies, both mental and physical as qualities for the individual to live and contribute to the development of the society. The skills, abilities and concept could be acquired through the training provided in the schools and colleges.

The implication of all these for teachers is that they should develop and employ learning approaches which should encourage learners to participate actively in the learning processes. Teachers are to promote learning methods which bring about interaction among students and improve on their relationship with individuals in the classroom. Igboko and Ibeneme (2006) pointed out that traditional education practices such as demonstration and lecture method alone have proved incapable of producing skills required for coping with the challenges posed by rapid technological development. Igboko and Ibeneme noted that teachers are strongly encouraged to use the students' activity-based and inquiry mode, involving substantial workshop activities in teaching to ensure achievement and retention of concepts in technology. One of the such methods in this regard is cooperative learning.

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Cooperative Learning refers to instructional method in which pair or small group of learners with different level of ability work together to accomplish a shared goal (Iqbal, 2004). In the view of Amita (2006), cooperative learning refers to a situation where a small dedicated group of students learn together and take advantages of each other's expertise to achieve a common goal. Mckeachie (2009) explained that in a Cooperative learning class, students often elaborate on the concept being taught to achieve what is expected. Elaborations not only enhance the learning of students who receive the explanation but could also deepen the understanding of the student providing the explanation.

Cooperative learning comprises instructional method in which teachers organize the students into small groups which then work together to help one another learn some academic content (Slavin, 2011). It is a kind of learning method in which students study together and complete goals. Each student contributes effort in small groups to promote all students' achievement. Slavin further posited that it could produce positive effect on student academic achievement and retention.

Academic achievement is defined as learning outcomes of the student in terms of level of skills, knowledge and ideas necessary for gainful employment in related occupations (Epunam, 2009). The author further noted that academic achievement connotes performance in a school subject as symbolized by scores or marks in an achievement test. Abdullahi (2013) described poor academic achievement as any performance that falls below a desired standard. The classroom teacher is therefore faced with the challenge of teaching to attain effective conceptual change, high academic and skill achievement. Learning occupies a very important place in one's life. It is the basis of human survival as well as the development and progress of the society.

However, the best efforts in learning may turn into a futile exercise, if the products of learning are not utilized at a later stage by the learner. For making use of material learnt it must remain in the learner's mind, stored up somehow, to be used when the need arises. This process is called retention. Retention of learning according to Ausubel and Robinson (2002) is the repeated performance of behaviour earlier acquired by the learner and elicited after an interval of time.

Retention with respect to technology means that a student has as an ability to recall or recognize the basic technology concepts which have been learned before. Technology involves the academic and practical study of materials, source of energy and natural phenomena with the ultimate intention of applying these to the service of man to make life more comfortable (Bamiro, Nurudeen & Akuru 2014). It is a major determinant of economy growth in the country. Basic Technology (encapsulated in technology education) is a compulsory subject in the Nine Year Basic Education programme. Its purpose is to contribute to the achievement of the national education goals by inculcation of technology literacy, that is, basic understanding of and capability in technology, exposure of students to the world of work to match their talents and interests for wise vocational choice; and inculcation of positive attitudes

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towards work as a source of human identity, livelihood and power (National Education Research Development Council, NERDC, 2007).

The aim of Basic Technology is to introduce students to technology right at the beginning of their junior secondary school career. The typical junior secondary Basic Technology curriculum consists of various topics, for the purpose of this study the following are captured thus: You and Technology, Safety, Material and processing, Drawing practice, Tools and machines, Applied Electricity and Electronics, Energy and power, Maintenance and building. The quality of basic technology teaching and learning in junior secondary school has a great influence and motivation on the achievements of students at the senior secondary or technical college. The effective teaching and learning of Basic Technology will expose students to the world of work and eventually qualify them to proceed to higher educational level so that they could become middle level manpower who are knowledgeable in the field of technology and possess the skills and ability to solve societal problems. Basic Technology students are therefore expected to have competencies in technology including the ability to develop functional knowledge of basic technology concepts and principles, observe and explore the technological environment, apply the skills and knowledge gained through the study of Basic Technology to solve day to day problem, develop scientific and technological attitudes such as curiosity and precision, manipulate simple tools for the purpose of demonstrating processes, and improvise simple equipment or machine from available resources in the immediate environment to solve societal problems (Federal Republic of Nigeria, FRN 2013).

Achieving these competencies therefore means that every student must be taught the basic technology so as to understand and master all the concepts in the Junior Secondary School Curriculum. The junior secondary schools do end with final external examination, which is normally conducted by National Examination Council (NECO) or State Ministry of Education. Students whether male or female register for the two external examinations or either as the case may be.

According to Safo, Ezenwa and Wushishi (2013), gender is the property that distinguishes organism on the basic of their reproductive roles as female and male. Studies on gender differences on academic achievement have presented mixed result. The belief that males perform better than the females in technical subject is being debunked by recent studies (Esiogbu, 2011; Eze, Ezenwafor, Obidile, 2016). The above views indicated that there are needs to re-examine the method of imparting the concept of basic technology to the students, so that the acquired knowledge would assist students to solve the day-to-day problem of real life situation. The classroom teacher is therefore faced with the challenge of teaching to attain effective conceptual change, high academic and skill achievement. Hence the researcher intends to find out the effect of cooperative leaning method (CLM) on academic achievement and retention of students in basic technology in Oyo State.

Statement of the Problem

There are opinions that associate poor academic achievement of students to poor method and approaches to teaching, lack of instructional materials and wrong method of teaching, which are teacher-centred and often create frustration, learning difficulties and do not encourage active participation of students. The traditional or conventional methods probably do not sufficiently give students the opportunity to participate in the classroom activities and as such students do not adequately acquire skills and knowledge required.

These methods do not seem to be yielding the expected results currently. There is observable declining trend in the academic achievement in Basic Technology by Junior Secondary Certificate (JSIII) students.

Between 2011 and 2015, 35% students out of those who sat for Basic Technology external examination passed at credit level (Federal Ministry of Education, 2013). Could this poor academic achievement be traceable to inappropriate method of teaching Basic Technology. There are opinions that student-centred methods could improve students' academic achievement more than conventional methods.

Based on the above view, there is therefore, the need to carry out a study on an innovative and participatory teaching method where students are helped to become active rather than passive learners. One of the teaching methods proposed by Slavin, (2011) that could produce positive effects on students' academic achievement and retention is cooperative learning method. It is on this basis, the study was conceived to determine the effects of cooperative learning method on academic achievement and retention of students' in Basic Technology when compared with conventional teaching method.

Purpose of the Study

The main purpose of the study was to determine the effects of cooperative learning method on the academic achievement and retention of students in Basic Technology. Specifically, the study determined the:

- 1. Pre-test and post-test achievement mean scores of students taught Basic Technology using conventional teaching method and those taught using cooperative learning method.
- 2. Academic retention mean scores of students taught Basic Technology using conventional teaching method and those taught using cooperative learning method.
- 3. Interaction effects of teaching methods and gender on students' academic achievement in Basic Technology.

Research Questions

The following research questions guided the study

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- 1. What are the effects on academic achievement of students taught basic technology using conventional teaching method and those taught using cooperative learning method?
- 2. What are the effects on the academic retention means scores of students taught basic technology using conventional teaching method and those taught using cooperative learning method?
- 3. What are the interaction effects of teaching methods and gender on students' academic achievement in basic technology?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance

- 1. There is no significant difference between the pre-test and post-test academic achievement mean scores of students taught basic technology using conventional teaching method and those taught using cooperative learning method.
- 2. There is no significant difference between the academic retention mean scores of students taught basic technology using conventional teaching method and those taught using cooperative learning method.
- 3. There is no significant interaction effect of the teaching methods and gender on students' academic achievement in basic technology.

Method

The population of the study was 19,892 (9,842 males and 10, 050 females) JSS II Basic Technology students in Oyo State. The purposive sample was used to select a sample of 114 (44 males and 70 females) students for the study. Pre-test, Post-test and non-equivalent group quasi-experimental research design was used for the study and the instrument for data collection was Basic Technology Achievement Test (BTAT) which was validated by three experts. A reliability correlation coefficient of 0.82 was obtained for the test items using test re-test and Person Product Moment Correlation. Mean was used to analyse data relating to the research questions while analysis of covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance.

Results

Research Question 1: What are the effects on academic achievement of students taught basic technology using conventional teaching method and those taught using cooperative learning method?

Table 1

Mean Achievement Scores of Students Taught Basic Technology Using Conventional Method and Cooperative Learning Method.

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Groups	N	Pre-Test	Post-Test \overline{X}_2	Mean Difference $\overline{X}_{\rm D}$
Control Group	56	27.46	33.95	22.94
Experimental Group	58	32.25	56.79	22.84

Table 1 shows control and experimental groups post-test mean achievement scores of 33.95 and 56.79 respectively with a mean difference of 22.84. The result shows that after treatment, the students in the experimental group achieved higher than those in the control group. This indicated that cooperative learning method could be effective.

Research Question 2: What are the effects on the academic retention means scores of students taught basic technology using conventional teaching method and those taught using cooperative learning method?

Table 2

Mean retention scores of students in Basic Technology taught using conventional method and those taught using cooperative learning method.

Methods	Post-test	Delayed Post-test	Mean Difference XD
Control Group 56	33.95	32.68	32.80
Experimental Group 58	56.79	65.48	

Table 2: shows control and experimental groups' delayed post-test mean achievement scores of 32.68 and 65.48 respectively with a mean difference of 32.80. The result shows that the students in the experimental group had higher mean retention scores than those in the control group.

Research Question 3: What are the interaction effects of teaching methods and gender on students' academic achievement in Basic Technology?

Table 3

Interaction Effects of Teaching Methods (CLM and CTM) and Gender on Students' Achievement in Basic Technology

Group	I	Pre-test	Post-te	est Mean	Difference
	Ν	Mean	N Mean		
		x -		$\overline{\mathbf{X}}$	XD

Experimental					
Male	30	32.77	30	58.07	25.30
Female	28	28.75	28	55.43	26.68
Control					
Male	24	34.08	24	35.21	1.13
Female	32	30.28	32	33.00	2.72

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Table 5 indicates that experimental groups pre-test mean scores for male (32.77) and female (28.75) were very close as well as the control groups mean scores for male (34.08) and female (30.28). After the treatment, the male students in the experimental group had a higher post-test mean scores of (58.07) than their male counterparts in the control group (35.21) while female students in the experimental group got a higher post-test mean score (55.43) than their female counterparts in the control group (33.00). There was an increase in the mean achievement scores across both teaching methods and gender. The post-test mean achievement scores of students taught basic technology across the two teaching methods show that male and female benefited from the teaching methods. This suggests there was no interaction between methods of teaching and gender.

Hypotheses 1: There is no significant difference between the pre-test and post-test academic achievement mean scores of students taught basic technology using conventional teaching method and those taught using cooperative learning method.

Source	Type III	Df	Mean	\mathbf{F}	P -value	Decision
	sum of		square			
	squares					
Corrected model	14871.582	1	14871.582	132.778	.000	
Intercept	1389.473	1		12.406	.000	S
Group	14871.582	1	1389.473	132.778	.000	
Error	12544.357	112	14871.582			
Total	264153.000	114	112.003			
Corrected Total	27415.939	113				

Table 4

ANCOVA Summary on Difference in Achievement Scores of Student's taught with Conventional Method (CTM) and those Taught with Cooperative Learning Method (CLM).

Table 4 shows that at 0.05 level of significance and 1 df, the p value is 0.000 which is lower than the level of significance 0.05. This means that there was significant difference between the post-test academic achievement mean scores of students taught basic technology using conventional teaching method and those taught using cooperative learning method. This null hypothesis was therefore rejected.

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Hypothesis2: There is no significant difference between the academic retention mean scores of students taught Basic Technology using conventional teaching method and those taught using cooperative learning method.

Table 5

ANCOVA Summary on Difference in Retention Scores of Students' taught with Conventional Teaching Methods (CTM) and those taught with Cooperative Learning Method (CLM).

Source	Type III Sum of squares	df	Mean Square	F	P- value	Decision
Corrected Model	4065.173 ^a	1	4065.173	11.998	.001	
Intercept	52437.667	1	52437.667	154.768	.000	S
Groups	4065.173	1	4065.173	11.998	.001	
Error	37949.353	112	338.816			
Total	319858.000	114				
Corrected Total	42012.526	113				

Data in Table 5 show that at 0.05 level of significance and 1 df, the p- value is 0.001 which is also lower than the level of significance 0.05. This means that there was significant difference in the retention mean scores of students taught basic technology using conventional teaching method and those taught using cooperative learning method. The null hypothesis was therefore rejected.

Hypothesis3: There is no significant difference between the academic retention mean scores of male and female students' taught Basic Technology using cooperative learning method and those taught using conventional teaching method. Data utilised to test Ho are presented in Table 9.

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Table 6

ANCOVA Summary on Difference between the Mean Retention scores of Male and Female Students' taught Basic Technology with (CLM).

	Type III Sum							
Source	Square df		Means square	F	P-Value			
Decision								
Corrected Model	5676.735 ^a	3	1892.245	8.336	.000			
Intercept	381.874	1	381.874	1.682	.197	NS		
Gender	1064.584	1	1064.584	4.690	.032			
Group	219.105	2	109.552	.483	.618			
Error	24968.282	110	226.984					
Total	216582.000	114						
Corrected Total	30645.018	113						

From table 6: It was discovered that 0.05 level of significance and 2 df the P-value is 0.618 which is higher than the level of significance 0.05. This shows that there is no significant difference in the academic achievement retention mean scores of male and female students' taught Basic Technology using cooperative learning method. The null hypothesis was therefore not rejected.

Discussion

Students taught basic technology using cooperative learning method (CLM) performed significantly higher in their post-test scores than those taught with conventional teaching methods. This is in agreement with the findings of; Eze, Ezenwafor and Obidile (2006) who reported that CLM had significant effect on the post-test achievement scores of students. This could be as a result of students' active involvement in the teaching and learning process when CLM is used.

Male and female students taught basic technology did not perform significantly higher in their post-test score than those taught basic technology using conventional teaching method this finding agreed with the report of Esiogbu (2011) which revealed that no gender related differences in academic achievement between male and female students. Thus, from the literature there are conflicting reports on gender related differences in achievement in school science.

High and low academic achievement students taught basic technology with cooperative learning method performed significantly higher in the post-test than those taught with conventional teaching method. The high level of improvement in academic achievement of low achiever taught basic technology with cooperative learning method could be as a result of self motivation of student created by the teaching method. However, the report of Safo, Ezenwa, and Wushishi (2013)

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disagreed with the findings current study. The author posited that academic achievement in examination is not influenced by motivating factors but a function of students' participatory.

The interaction effects of treatments and gender on students' academic achievement in basic technology is not significant. This is in agreement with the report of Ausubel and Robinson (2002). The present study has approved that assertion wrong. The significant improvement noted in the male and female interaction significantly improved the academic achievement of the students this could be as a result of one of the advantages derivable from using cooperative learning method.

Conclusion

Based on the findings of this study, it was concluded that cooperative learning method is an effective method in the teaching of basic technology. Therefore, cooperative learning method could be effective method for improving students academic achievement and knowledge retention in basic technology.

Recommendations

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

- 1. Teachers of Basic Technology should acquire the knowledge and skills for using Cooperative Learning Method through is-service training, conferences, seminars and workshops
- 2. School administration should encourage Basic Technology teachers to use cooperative learning method by providing opportunities for in-service training to equip them with competencies needed in it.
- 3. Curriculum designer should incorporate cooperative learning method in the Basic Technology curriculum and emphasize activities of teachers and students.
- 4. Education stakeholders and relevant professional associations such as Nigerian Association of Teachers of Technology (NATT), Association of Vocational and Technical Educators of Nigeria (AVTEN) should sponsor further research on the efficacy of cooperative learning method on other technology subject areas so as to arrest the declining academic achievement and enrolment pattern of students in technology and vocational education programme.
- 5. Government, through the Ministry of Education should ensure the provision of adequate instructional materials at secondary education level to facilitate the use of CLM in the teaching of Basic Technology.

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References

- Abdullahi, O. E. (2013). Interrelationship between personal factor and academic achievement in mathematics of Ebira secondary schools students in Kogi state. *An International Journal of Psychology*, 5(1), 154-155.
- Agbatogun, A. (2010). Psycho-socio-factors and students performance in educational technology. *ElectronicsJournal of Psychology*, 7(4) 25-32.
- Amita, M. A. (2006). "Families, Children and Communities in a Multicultural and Diverse Society."Research paper on curricular models, Nova Southeastern University.
- Ausubel, D. P. & Robinson, F. G.(2002). School learning: An introduction to educational psychology. New York: Holt Rhinehart and Winson Inc.
- Bamiro, O. A., Nurudeen, A. & Akuru, I. O. (2014). *Basic Technology for Schools and Colleges*. Lagos, Evans Brothers Publishers.
- Epunam, A. D. (2009). *Influence of school environmental variables on academic performance as perceived by student* (Unpublished master's thesis) University of Nigeria, Nsukka.
- Esiogbu, G. O. (2011). Achieving gender equity in science class: shift from competitive to cooperative learning. *Multicultural Education and Technology*.5 (4), 244-257.
- Eze, T. I. (2013). Languageand Culture in Technical Vocational Education and Training. *Journal of Nigeria Languages and Culture*, 14(2), 1-16.
- Eze, T. I., Ezenwafor, J. I. & Obidile, J. I. (2016) Effect of Gender on Students' Academic Performance and Retention in Financial Accounting in Technical Colleges. British *Journal of Education, Society & Behavioural Science, 18 (4)* 1-9.
- Federal Republic of Nigeria, (FRN, 2013).National Policy on Education; Lagos, NERDC Press.
- Igboko, K. O. & Ibeneme, O. T. (2006).Effects of some cognitive constructivism instructional approaches on student' achievement and retention in the study of introductory technology in Nigeria. *Journal of Science Teachers Association of Nigeria*, 41 (1 & 2), 37-43.

- Iqbal, M. (2004).Effects of cooperative learning on academic achievement of secondary school students in mathematics. Unpublished Ph.D. thesis submitted to the University Institute of Education and Research. University of Arid Agriculture, Rawalpindi, Pakistan.
- Lawal, Y. O. (2013). Education as an instrument for effective national development: Which way Nigeria. *Business and Entrepreneurship Journal*, 2(2), 27-38.

Mckeachie, W.J. (2009) Teaching Tips: *Methods, Research and Theory for College and University Teachers* (11thed) Bostom, M. A. Houghton Mifflin

- Nigerian EducationalResearchandDevelopment Council (2007). 9 YearBasic Education Curriculum: Basic Technology for Junior Secondary 1-3.
- Safo, A. D., Ezenwa, V. I. & Wushishi, D. I. (2013). Effects of computer Assisted Instructional Package on Junior secondary Schools' Achievement and Retention in Geometry in Minna Niger State, Nigeria, International Journal of Humanities and social science invention, 2(5), 69-74. Retrieved from www.Ijhssi.org.
- Slavin, R. E. (2011). Instruction Based on Cooperative Learning. In R.E. Mayer & P.A Alexander (Eds.), Handbook of Research on Learning and Instruction (pp. 344-360). New York: Taylor & Francis.

BUSINESS EDUCATORS' APPRAISAL OF COLLEGES OF EDUCATION BUSINESS EDUCATION CURRICULUM CONTENT FOR ENTREPRENEURIAL SUCCESS IN NIGER DELTA REGION OF NIGERIA

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Abstract

In order to execute this study, three research questions were raised and three hypotheses were tested for the study. Descriptive research design was adopted for the study. The entire population of 198 business educators in Bayelsa, Delta and Rivers States of Nigeria were used for the study. Adequacy of Colleges of Education Business Education Curriculum Content for Entrepreneurial Success Questionnaire (ACEBE-CCESQ) was used for data collection. Cronbach Alpha was used to measure the internal consistency which yielded the reliability co-efficients of 0.83 and 0.76 for cluster B1 and B2 respectively with an overall reliability co-efficient of 0.80. Mean and standard deviation were used to answer research questions while analysis of variance was used to test the hypotheses at 0.05 level of significance. Findings of the study revealed that business educators, irrespective of their years of experience rated the entrepreneurship education and office technology and management curriculum contents as adequate and information communication and technology curriculum content of business education in colleges of education as very inadequate for entrepreneurial success in the Niger Delta region. The study concluded that, absence of requisite technologies and practical work-based oriented courses that would make the curriculum contents of business education programme meet the modern requirements of the globalized business world is the bane of the un-employability status of business education graduates in Nigeria. The study recommended among others that, the National Commission for Colleges of Education should beef up the curriculum content of business education programmes in colleges of education in Nigeria with trending technological skill courses to enable business education graduates succeed in the 21st century business environment.

Keywords: Education, globalization, business education, curriculum, information communication and technology and entrepreneurship.

Introduction

Education is a catalyst for social-economic integration, political transformation and scientific and technological development. The Nigerian educational system is categorized into basic education, senior secondary education and tertiary education. According to the Federal Republic of Nigeria (2013), one of the goals of tertiary education is principally the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for individuals to leave in, and contribute to the development of the society. One of the educational programmes that can lead to the attainment of these goals of education is business education. Business education is a programme of study designed for the actualization of self-employment and industrialization.

Business education is that aspect of general education that prepares students' for employment and advancement in a broad range of office occupations, accounting professions, marketing occupation, teaching profession and entrepreneurship venture (Onokpaunu, 2016). In the view of Ezenwafor and Onokpaunu (2017), business education programme is a branch of vocational education concerned with exposing its recipients to the internal and external foundations and functioning of the workplace. The current business environment is operating on a globalized dimension. According to Ezenwafor and Onokpaunu (2017), globalization is the inter-connectivity and acceptance of ideas, information and cultures between systems of the world without barriers. Irrespective of the different nomenclatures associated with the phenomenon of globalization, Information Communication and Technologies (ICTs)and entrepreneurship are major constructs of globalization. Developing countries such as Nigeria cannot stay in touch with the fast pace of globalization with educational programmes that does not place emphasis on the implementation of workplace practices, ICTs and entrepreneurship education in her educational curriculum.

For every educational programme, there is a laid down curriculum. Curriculum refers to the essential learning experiences of academic and non-academic contents which enables students' to learn the fundamental knowledge and skills of a particular school subject. Hence, Ezenwafor and Onokpaunu (2017) posited that the reliable medium, through which the mission and vision of business education programmes can be achieved, stems from effective implementation of its curriculum. Correspondingly, Okoro (2015) opined that business education curriculum entails educational training which an individual receives in order to acquire adequate attitudes, concepts, knowledge, understanding and skills in business subject teacher or wherever he may find himself in the business world.

In Nigeria, business education programmes are offered in the faculty of education of universities and in the school or department of business and technical education in colleges of education. In Nigerian colleges of education, business

education programme is departmentalized into accounting education, entrepreneurship education, office technology and management or secretarial education and computer education. This is why; the National Commission for Colleges of Education (NCCE)(2012) structured the contents of business education curriculum in colleges of education into; accounting, Office Technology and Management (OTM), teaching methodology, entrepreneurship, Information Communication and Technology (ICT) and entrepreneurship. The objectives of business education curriculum content in colleges of education as outlined in the National Commission for Colleges of Education (2012) 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.

An objective observation of the curriculum contents and objectives of business education in colleges of education in Nigeria, one could conclude that, it is an educational programme embedded with various themes of skills acquisition and selfemployment propensities geared towards energizing and preparing students for entrepreneurial success. Entrepreneurial success is the ability of business managers and owners' to initiate, grow and develop their business entities above liquidation. Johnson (2010) described entrepreneurial success as the ability of an entrepreneur to satisfy the demands and needs of investors, customers and suppliers among others in the business environment. Most importantly, Karpak and Topcu (2010) posited that the longevity of a small and medium scale enterprise is an important measure of entrepreneurial success.

Students of business education programmes from colleges of education in Nigeria are expected to acquire the requisite educational experiences to become key players of the emerging globalized economy and be able to set up sustainable business enterprises upon graduation. Surprisingly, these graduates prefer to besiege private companies and government offices in search of jobs that are either few in supply or non-existent. In places, where graduates of business education programmes are employed, employers of labour complained about the dearth of the required skills-set for business operations. Even the few graduates of the programme that engage in entrepreneurial ventures by establishing small business enterprises ends up in bankruptcy and liquidation.

Graduates of business education programmes are in different parts of the country including the oil-rich Niger Delta region of Nigeria. Despite, the abundant business and entrepreneurial opportunities available in the oil-rich region of the

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country, most business education graduates in the region make little or no attempt to establish their own enterprises. Since, business educators are only the operators of business education curriculum but also prepare business education students for the world of work and employers of labours complain of their un-employability, the researchers are motivated to ascertain from business educators, their ratings on the adequacy of business education curriculum contents for entrepreneurial success which these graduates were exposed to during their years of studentship in colleges of education in the Niger Delta region of Nigeria.

Business educator's ratings' of the adequacy of business education curriculum contents for entrepreneurial success can be affected by their years of teaching experience. Given the number of years business educators have been teaching with business education curriculum in colleges of education, they are expected to have an in-depth understanding of the strengths and weakness of the curriculum content. Suffice to say, therefore that, years of experience may influence the opinions of business educators on the adequacy of the course titles and contents of business education curriculum. However, these are theoretical assumptions which have not been empirically proven. It is against this background that the researchers decided to empirically ascertain, business educators ratings' on the adequacy of colleges of education business education curriculum contents for entrepreneurial success in Niger Delta region of Nigeria.

Statement of the Problem

The rich outline of business education curriculum in colleges of education is capable of producing competent educators and enterprising entrepreneurs. However, Ezenwafor and Onokpaunu (2017) asserted that Nigerian business education graduates are roaming the street unemployed not because they do not have the correct résumé but because employers of labour maintain that their expertise is paper-oriented and not skill-based. Although, business education programme is offered in tertiary institutions across the Niger Delta region of Nigeria, over 80 percent of Niger Delta youths are unemployed after graduation (Ubulom & Enyoghasim, 2012).

It thus, appears that, there are some fundamental issues in the curriculum. Could it be that, students of business education programmes were not prepared enough from the curriculum contents to pursue entrepreneurial engagements upon graduation? Again, there seems to be hardly any evidence of relevant scientific (empirical) studies in the area of study, which have investigated business educators ratings' on the adequacy of colleges of education business education curriculum contents for entrepreneurial success. As a result of the above, the researchers sought to appraise the adequacy of the present business educators in the Niger Delta Region of Nigeria with a view of providing relevant empirical data for an objective and comprehensive review of the curriculum.

Purpose of the Study

Specifically, the study sought to determine business educators' appraisal on:

- 1. The adequacy of entrepreneurship education curriculum content of business education for entrepreneurial success relative to NCCE minimum standards.
- 2. The adequacy of Office Technology and Management (OTM) curriculum content of business education for entrepreneurial success relative to NCCE minimum standards.
- 3. The adequacy of Information Communication and Technology (ICT) curriculum content of business education for entrepreneurial success relative to NCCE minimum standards.

Research Questions

In the opinion of business educators in Niger Delta, Nigeria, how adequate is:

- 1. Entrepreneurship education curriculum content of business education for entrepreneurial success relative to NCCE minimum standards?
- 2. Office technology and management curriculum content of business education for entrepreneurial success relative to NCCE minimum standards?
- 3. Information Technology and Communication (ICT) curriculum content of business education for entrepreneurial success relative to NCCE minimum standards?

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 educators on the adequacy of entrepreneurship education curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience (1 5 years, 6 10 years and above 10 years)
- 2. There is no significant difference in the mean ratings of business educators on the adequacy of OTM curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience (1 5 years, 6 10 years)
- 3. Business educators will not differ significantly in their mean ratings on the adequacy of ICT curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience (1 5 years, 6 10 years)

Method

This study adopted a descriptive survey design. The study was conducted in the Niger Delta region of Nigeria which comprises of Akwa-Ibom, Bayelsa, Cross River, Delta, Edo and Rivers States. However, the study covered four states namely; Bayelsa, Delta, Edo and Rivers State. The population of 198business educators in Bayelsa, Delta and Rivers States of Nigeria was studied without sampling. Adequacy

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of Colleges of Education Business Education Curriculum Content for Entrepreneurial Success Questionnaire (ACEBE-CCESQ) which is an inventory of NCE business education curriculum was used for data collection. The questionnaire contained 139 items on a two-point rating scale of adequate and not adequate. Face validity of the instrument was determined by two experts; one in the Department of Business Education and the other from Measurement and Evaluation all from Delta State University, Abraka. A pilot test was conducted to establish the reliability of the instrument by administering it to 20 business educators in Anambra State which were not part of the study and Cronbach Alpha was used to measure the internal consistency which yielded the reliability co-efficients of 0.83 and 0.76 for the two clusters of the instrument which yielded an overall reliability co-efficient of 0.80. The researchers administered the instrument to the subjects in their States with the help of five research assistants. The data collected were analyzed using mean and standard deviation to answer the research questions and determine the homogeneity or otherwise of the respondents' views. Decisions on the research questions were based on the grand mean in relations to the real limits of numbers. Therefore, items with mean ratings of 1.50 - 2.00 are rated Adequate and those with 0.50 - 1.49 are rated Not Adequate. Analysis of Variance (ANOVA) was used to test the null hypotheses at 0.05 level of significance. A 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.

Research Question 1

How adequate is entrepreneurship education curriculum content of business education for entrepreneurial success relative to NCCE minimum standards?

Data relating to this research question are analyzed and presented in Table 1.

Table 1

Respondents'	mean	ratings	on	the	adequacy	of	entrepreneurship	education
curriculumcon	tent of	business o	educa	tion fo	or entrepr	eneur	rial success	
			2					

S/N	S/N Entrepreneurship Education Course Titles and								
	Curriculum Contents	X	SD	Remarks					
	Introduction to Entrepreneurship								
1	Introduction of entrepreneurship	1.98	.46	Adequate					
2	Types of entrepreneurs	2.00	.77	Adequate					
3	Entrepreneurial theories	1.73	.98	Adequate					
4	Types of risks and risk management	1.15	.54	Not Adequate					
5	Conditions for establishing forms of business ownership	2.00	.87	Adequate					
6	Issues and problems of business and technology	1.86	.66	Adequate					
7	Old, new and innovative techniques of financing busines	ss 1.92	.90	Adequate					
8	Site selection and location of business	2.00	.66	Adequate					
9	Consumer behaviour	1.77	.52	Adequate					
10	Human resource management	1.14	.49	Not Adequate					
Ent	trepreneurship II								
11	Management and administration of SMEs 1.99	.83	Adequ	uate					
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12	Business future and succession issues	1.10	.57	Not Adequate
13	Pilot study and feasibility report	1.29	.75	Not Adequate
14	Elements of marketing	1.78	.41	Adequate
15	Functions of management	1.90	.62	Adequate

As depicted in Table 1, the mean ratings of business educators on 11 out of the 15 items fell within the range of 1.50 - 2.00 indicating that the items were rated adequate while remaining four items fell within the range of 0.50 - 1.49 were rated not adequate. On the whole, majority of the respondents used in the study agreed that the entrepreneurship education curriculum content of business education is adequate for entrepreneurial success relative to the NCCE minimum standards. The standard deviation of all the course titles and curriculum contents of entrepreneurship education for entrepreneurial success range from 0.41 to 0.98 showing that the respondents are not wide apart in their mean ratings.

Research Question 2

How adequate is office technology and management curriculum content of business education for entrepreneurial success relative to NCCE minimum standards?

Data relating to this research question are analyzed and presented in Table 2.

Table	2
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Respondents' mean ratings on the adequacy of OTM curriculum content of
business education for entrepreneurial success

S/N	OTM Course Titles and Curriculum Contents X S	DF	Remarks	
	Office Practice I			
1	meaning, important and components of business studies	1.73	3.47	Adequate
2	careers opportunities in office management	1.69	.69	Adequate
3	structure, functions and different offices in an organization	2.0	0.80	Adequate
4	meaning, function and qualities of clerical staff	1.92	2.49	Adequate
5	confidentiality of office information	1.7	6 .72	Adequate
6	various departments and their functions in an organization	2.0	0.51	Adequate
7	meaning, functions and qualities of a receptionist	2.0	0.66	Adequate
8	types of communication in the office	1.98	3.43	Adequate
	Shorthand I			
9	meaning, historical development and systems of shorthand	1.80) .77	Adequate
10	The 24 consonants of shorthand	1.68	3.33	Adequate
11	The 12 vowels of shorthand	1.79	.62	Adequate
12	The two forms of R	1.55	5 .50	Adequate
13	Dipthongs	1.63	.81	Adequate
14	S circle studies	1.86	õ.44	Adequate
15	ST circle and STR loops	1.74	.69	Adequate

16	Ses and SW circles	1.66	.38	Adequate
17	vowel indication	1.22	.57	Not Adequate
	Keyboarding I			
18	parts and uses of typewriter	1.73	.96	Adequate
19	care and maintenance of typewriter	1.41	.55	Not Adequate
20	paper sizes and their uses	1.26	.81	Not Adequate
21	sitting and fingering positions	1.83	.66	Adequate
22	starting with home/guide keys board exercise	1.64	.74	Adequate
23	tabulator key and bars	1.59	.52	Adequate
24	vertical and horizontal centring	1.62	.87	Adequate
25	speed development	1.70	.43	Adequate
	Office Practice II			*
26	Imprest accounting control	1.88	.96	Adequate
27	duplication process	1.71	.64	Adequate
28	office supplies	1.96	.85	Adequate
29	office equipment and machines in common use	1.33	.50	Not Adequate
30	office behaviours	2.00	.69	Adequate
31	model office arrangement and layout	1.79	.77	Adequate
	Shorthand II			1
32	Halving and its principles	1.51	.42	Adequate
33	downward L	1.73	.55	Adequate
34	Double consonants: PL and PR series	1.51	.31	Adequate
35	Double consonants - Curves	1.69	.69	Adequate
36	Additional forms	1.07	.48	Not Adequate
37	Omission of consonants and intersections	1.86	.36	Adequate
38	F/V hooks	1.18	.29	Not Adequate
39	N hook	1.16	.54	Not Adequate
40	Shun hooks	1.23	.61	Not Adequate
41	compound consonants	1.14	.43	Not Adequate
42	Tick and dot H	1.35	.59	Not Adequate
	Keyboarding II			
43	Printers' signs and abbreviation	1.76	.76	Adequate
44	words and figure	1.81	.51	Adequate
45	layout of business letters	2.00	.83	Adequate
46	layout of memos	1.33	.66	Not Adequate
47	main and columns headings	1.41	.59	Not Adequate
48	speed and accuracy development	1.59	.88	Adequate
-	Word Processing I			1
49	Alphabetic sentence drills and remedial exercises	1.31	.52	Not Adequate
50	Procedure and layout of business, personal and official	-		
-	letters and memos	1.22	.85	Not Adequate
51	Preparation of manuscript and insertion of matters	1.69	.76	Adequate
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52	Speed and accuracy development in passages	1.55	.90	Adequate
53	Additional forms	1.14	.56	Not Adequate
	Shorthand III			
54	Doubling and its principles	1.66	.67	Adequate
55	Prefixes	1.73	.43	Adequate
56	Suffixes and word endings	1.59	.35	Adequate
57	note taking and transcription	1.85	.80	Adequate
58	essential vowels	1.53	.57	Adequate
59	short forms and contractions	1.66	.61	Adequate
60	advanced phraseography	1.81	.94	Adequate
61	speed and accuracy in passages	1.64	.82	Adequate
	Word Processing II (35 WPM)			
62	Production of display work	1.69	.42	Adequate
63	three-four columnar work	1.92	.27	Adequate
64	speed development	1.59	.32	Adequate
65	business letter, enclosures and attention line	1.43	.50	Not Adequate
66	stencil cutting, proof-reading and correction of errors	1.27	.39	Not Adequate
	Principles of Management			
67	definition, principles and functions of management	1.66	.97	Adequate
68	the basis of the structure and character of organization	1.71	.65	Adequate
69	the basis and dynamics of human behaviours in an			
	organization	1.82	.45	Adequate
70	the significance, modes and problems of communication			
	in an organization	1.53	.52	Adequate
71	the dynamics and methods of management of change			
	in institutions	1.78	.81	Adequate
72	conflict management	1.89	.68	Adequate
73	introduction to personnel management	1.95	.49	Adequate
	Business Communication			
74	general overview of business communication	2.00	.82	Adequate
75	methods and principles of effective communication	1.82	.53	Adequate
76	barriers and remedies of effective communication	1.99	.76	Adequate
77	the impact of information technology	1.90	.64	Adequate
	Business Communication I	~ ~		
78	guidance for composing letters 1.16	.52		dequate
79	audience and style 1.52	.85	Adequ	
80	general format of a letter 1.79	.76	Adequ	
81	personal/informal letter 1.55	.40	Adequ	
82				
83	application, replies to offer of appointments and queries1.		.57	Not Adequate
84	writing inferences 1.23	.64	Not A	dequate
	180	D: 1 (D	,	

85	invitation to interviews and communications	1.39	.43	Not Adequate
86	Curriculum Vitae (CV)	1.60	.79	Adequate
00	Business Communication II	1.00	•••	1.000,0000
87	Advertising	1.74	.66	Adequate
88	writing on the job	1.28	.85	Not Adequate
89	memorandum	1.79	.76	Adequate
90	briefs	1.32	.90	Not Adequate
91	minutes	1.11	.57	Not Adequate
92	reports writings and meetings	1.26	.96	Not Adequate
	Shorthand IV			-
93	Circles and strokes	1.51	.42	Adequate
94	Loops- Stee and Ster	1.92	.61	Adequate
95	Triphones and Diphones	1.69	.76	Adequate
96	abbreviation device	1.88	.54	Adequate
97	speed development	1.73	.83	Adequate
98	general consolidation	1.67	.49	Adequate
	Word Processing II (50 WPM)			
99	layout of documents	1.58	.72	Adequate
100	speed development/consolidation	1.92	.86	Adequate
101	advanced display work and tabulations	1.89	.64	Adequate
102	advanced literacy and itinerary work	1.66	.58	Adequate
103	advanced keyboarding skills and accuracy	1.94	.77	Adequate
104	active printer and print documents	1.83	.64	Adequate
	Office Management			
105	office management	2.00	.38	Adequate
106	office planning and layout	1.73	.62	Adequate
107	management processes and functions	1.87	.76	Adequate
108	filing and indexing	1.97	.84	Adequate
109	record management	1.90	.57	Adequate
110	personnel management	1.98	.60	Adequate
111	staff recruitment	1.79	.49	Adequate
112	wages and salaries administration	1.86	.23	Adequate
113	staff training and development	1.51	.62	Adequate
114	work management and standards	1.24	.37	Not Adequate

As depicted in Table 2, the mean ratings of business educators on 87 out of the 114 items fell within the range of 1.50 - 2.00 indicating that the items were rated adequate and the remaining 27 items with a mean ratings ranging between 0.50 - 1.49 were rated not adequate. On the whole, majority of the respondents agreed that the OTM curriculum content of business education is adequate for entrepreneurial success relative to the NCCE minimum standards. The standard deviation of all the course titles and curriculum contents of office technology and management for

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entrepreneurial success range from 0.23 to 0.97 showing that the respondents are not wide apart in their mean ratings.

Research Question 3

How adequate is Information Technology and Communication (ICT) curriculum content of business education for entrepreneurial success relative to NCCE minimum standards?

Data relating to this research question are analyzed and presented in Table 3.

Table 3

Respondents' mean ratings on the adequacy of ICT curriculum content of business education for entrepreneurial success

S/N	ICT Course Titles and Curriculum Contents	XS	SD	Remarks
	Computer Appreciation			
10ve	erview of computer hardware and their characteristics	1.86	.74	Adequate
20ve	erview of computer software and their characteristics	1.32	.36	Not Adequate
3Hist	torical evolution of computers	2.00	.68	Adequate
4 Co	mputer techniques	1.34	.45	Not Adequate
5	Programming languages	1.19	.80	Not Adequate
	Computer Application			
6	Concept of information technology	1.95	.46	Adequate
7	Role of computer in information technology	1.88	.63	Adequate
8	Word processing: Concept and application areas	1.24	.76	Not Adequate
9	Electronic data application systems	1.43	.85	Not Adequate
10	Electronic communication systems	1.37	.58	Not Adequate

As depicted in Table 3, the mean ratings of business educators on four out of the 10 items fell within the range of 1.50 - 2.00 indicating that the items were rated adequate and the remaining six items fell between 1.00 - 1.49 were rated not adequate. On the whole, majority of the respondents used in the study agreed that the ICT curriculum content of business education is very inadequate for entrepreneurial success relative to the NCCE minimum standards. The standard deviation of all the course titles and curriculum contents of Information Technology and Communication for entrepreneurial success range from 0.36 to 0.85 showing that the respondents are not wide apart in their mean ratings.

Testing of hypotheses

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Hypothesis 1

There is no significant difference in the mean ratings of business educators on the adequacy of entrepreneurship education curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience

Data obtained in respect of hypothesis 1 were analyzed and presented in Table 4.

Table 4

ANOVA summary of business educators mean ratings on the adequacy of entrepreneurship education curriculum content of business education for entrepreneurial success

Source of	Sum of		Mean	F-		
Variance	Squares	df	Square	value	P-value	Inference
Between Groups	57.3	2	6.94	.107	0.116	Not Significant
Within Groups Total	102.9 160.2	195 197	9.19			C

Data in Table 4 shows that the F-value of 0.107 with p-value of 0.116 at degree of freedom of 2 and 211 is greater than the criterion value of 0.05 (p>0.05). This means that business educators did not differ significantly in their mean ratings on the adequacy of entrepreneurship education curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience. Therefore, the null hypothesis was accepted.

Hypothesis 2

Table 5

There is no significant difference in the mean ratings of business educators on the adequacy of office technology and management curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience

Data obtained in respect of hypothesis 2 were analyzed and presented in Table 5.

ANOVA summary of business educators mean ratings on the adequacy of OTM							
curriculum content of business education for entrepreneurial success							
Source of	Sum of		Mean	F-			
Variance	Squares	df	Square	value	P-value	Inference	
Between Groups	146.26	2	13.01	.0310	0.043	Not Significant	
Within Groups Total	908.68 1054.94	195 197	32.54			C	

Data in Table 5 shows that the F-value of 0.310 with p-value of 0.043at degree of freedom of 2 and 196 is greater than the criterion value of 0.05 (p>0.05). This means that business educators did not differ significantly in their mean ratings on the adequacy of office technology and management curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience. Therefore, the null hypothesis was accepted.

Hypothesis 3

Business educators will not differ significantly in their mean ratings on the adequacy of ICT curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience

Data obtained in respect of hypothesis 3 were analyzed and presented in Table 6.

Table 6

ANOVA summary of business educators mean ratings on the adequacy of ICT
curriculum content of business education for entrepreneurial success

Source of	Sum of		Mean	F-		
Variance	Squares	df	Square	value	P-value	Inference
Between Groups	72.0	2	4.86	.227	0.201	Not Significant
Within Groups	210.6	195	11.01			
Total	282.6	197				

Data in Table 6 shows that the F-value of 0.227 with p-value of 0.201 at degree of freedom of 2 and 211 is greater than the criterion value of 0.05 (p>0.05). This means that business educators did not differ significantly in their mean ratings on the adequacy of ICT curriculum content of business education for entrepreneurial success relative to NCCE minimum standards based on their years of experience. Therefore, the null hypothesis was accepted

Discussion of findings

Findings of the study revealed that business educators rated majority of entrepreneurship education curriculum content of business education programme in colleges of education as adequate for entrepreneurial success in the Niger Delta region. This finding tallies with Esene (2015) who discovered that entrepreneurship education curriculum content is adequate for entrepreneurial engagements. Based on the course titles, the study discovered that, the curriculum contents of introduction of entrepreneurship, types of entrepreneurs, entrepreneurial theories, conditions for establishing forms of business ownership, old, new and innovative techniques of financing business, site selection and location of business, management and administration of SMEs and elements of marketing of entrepreneurship education

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curriculum, functions of management, consumer behaviour and issues and problems of business and technology were rated were rated adequate for entrepreneurial success. This finding is in tandem with Ibrahim (2014) who reported that business and management education have enough theoretical contents to propel students for entrepreneurial and vocational activities. Additionally, the findings of the study revealed that business educators rated the curriculum contents of pilot study and feasibility report, business future and succession issues, types of risks and risk management and human resource management as not adequate for entrepreneurial success. This finding is in agreement with Hafiz and Sa'ad (2015) which reported that some components of entrepreneurship curriculum content must be responsive enough to address shortcomings in the school system. Furthermore, the study also found that years of experience of business educators did not significantly differ in their mean ratings on the adequacy of entrepreneurship education curriculum content of business education for entrepreneurial success relative to NCCE minimum standards. This implies that business educators, being operators of business education curriculum believed that the NCE entrepreneurship education curriculum content is rich enough to produce future entrepreneurs capable of establishing new businesses.

Findings of the study revealed that business educators rated majority of office technology and management curriculum content of business education programme in colleges of education as adequate for entrepreneurial success in the Niger Delta region. This was supported by Harms, Stehr and Harris (2011) which noted that the mission statements direct OTM Educators to prepare students for careers in technologically based office environment as well as in the business world. A close look into OTM curriculum contents shows that, it is categorized into six components, which are; office practice, office practice, keyboarding, shorthand, word processing, business communication and management. Based on the course titles, the study discovered that, majority of the respondents rated the six components as adequate for entrepreneurial success. This finding tallies with Esene (2014) who reported that OTM curriculum should be constantly reviewed, revised and adjusted by specialists in the academic and industries to enable graduates fit properly and competently in the workplace. Similarly, Agbongiasede (2014) reported that OTM curriculum content is suffering from high irregular development because for more than ten years nothing has been done to update and improve the curriculum contents with modern realities. No wonder, the study discovered that the curriculum content is not adequate enough for equipping OTM students with the skills of writing business letters, proof-reading and correction of errors, replies to offer of appointments and queries, writing inferences, briefs and minutes of meetings. In addition, the study also found that years of experience of business educators did not significantly differ in their mean ratings on the adequacy of OTM curriculum content of business education for entrepreneurial success relative to NCCE minimum standards. This implies that, business educators in the Niger Delta region of Nigeria, regardless of their years of business experience

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agreed that the OTM curriculum content of business education is adequate for entrepreneurial success

More so, outcome of the study revealed that business educators rated the ICT curriculum content of business education programme in colleges of education as not adequate for entrepreneurial success in the Niger Delta region. The outcome of this study agrees with the finding of Ile and Ementa (2016) which discovered that the ICT curriculum content of business education programme is inadequate for the acquisition of ICT skills. Based on the course titles, the study discovered that, the curriculum content of overview of computer software and their characteristics, computer techniques, programming languages, word processing: concept and application areas, electronic data application systems and electronic communication systems were rated not adequate for entrepreneurial success. From the above findings, the practical oriented contents of ICT curriculum need modern fine tuning to enable students succeed entrepreneurially in the ICT landscape. This finding is consistent with Mihai (2010) who reported that the emergence of many new trends, including the rise in technologies and recent changes of the industrial profile of the labour market are not integrated in higher institutions curriculum. It is imperative to mention that business educators rated the ICT curriculum contents of overview of computer hardware and their characteristics, historical evolution of computers, concept of information technology as adequate and role of computer in information technology as adequate for entrepreneurial success. Perhaps, the fact that, these course titles and curriculum content are theoretical based could be responsible for the rating given by business educators. Although, the course titles and curriculum contents are in agreement with the business world; major scope of the ICT curriculum content of business education has practically remained the same over the years and some curricular content have not been expanded to suit modern realities of the technological era. No wonder, Ohakwe and Njoku (2009) reported that business education graduates cannot effectively implement advanced ICT packages in the world of work. Furthermore, years of experience of business educators did not influence their mean ratings on the adequacy of ICT curriculum content of business education for entrepreneurial success relative to NCCE minimum standards. This means that, business educators in the Niger Delta region of Nigeria, regardless of their years of business experience agreed that the ICT curriculum content of business education is not adequate for entrepreneurial success. This implies that business educators are calling for curriculum reforms that will be able to prepare their students for advanced ICT operations.

Conclusion

The structural layout of business education curriculum is rich, authentic and ideal for the requirements of the globalized economy. The study clearly showed that the theoretical contents of business education curriculum are adequate for entrepreneurial success while the practical contents of the programme are not

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adequate for entrepreneurial success. Based on these findings, the researchers concluded that, absence of requisite technologies and practical work-based oriented courses that would make the curriculum contents of business education programme meet the modern requirements of the globalized business world is the bane of the unemployability status of business education graduates in Nigeria

Recommendations

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

- 1. The National Commission for Colleges of Education should ensure that those items in the curriculum content of business education programmes in colleges of education in Nigeria which were not adequate for entrepreneurial success should be reviewed and redesigned to suit modern realities of the business world
- 2. The National Commission for Colleges of Education should beef up the curriculum content of business education programmes in colleges of education in Nigeria with trending technological skill courses to enable business education graduates succeed in the 21st century business environment.
- 3. Business educators in Colleges of education should regularly invite successful accounting, office technology and management, entrepreneurship and information communication and technology entrepreneurs to provide real life business experiences with business education students to expose them with the current skills needed in the business world.

References

- Agbongiasede, E.E. (2014). Office technology and management curriculum in polytechnics: Appraisal. *Nigeria Journal of Business Education*, 1(3), 30-36
- Esene, R.A. (2014). Challenges facing office educators in the implementation of office technology and management curriculum and new technologies in the polytechnics in South-South geo-political zone of Nigeria. *World Educators* Forum, 3(1), 1 20
- Esene, R.A. (2015). A critical appraisal of adequacy of contents of EDE curriculum of polytechnic education towards meeting entrepreneurial skills of OTM graduates. *British Journal of Education*, 3(1), 14 22.
- Ezenwafor, J.I., & Onokpaunu, M.O. (2017).Postgraduate business education students' rating of the teaching of soft skills in tertiary institutions for SMES operation in Nigeria.North Asian International Research Journal of Multidisciplinary, 3(11), 19 – 31

NAU Journal of Technology & Vocational Education Vol.3 No.1 2018. All Rights Reserved. http://www.naujtved.com.ng

- Ezenwafor, J.I.,& Onokpaunu, M.O. (2017).Perception of business educators on the relevance of integrating globalized workplace skills in the business education curriculum in tertiary institutions in Nigeria. *Education & Science Journal of Policy Review and Curriculum Development*,7(1),1–10.
- Federal Republic of Nigeria (2013). National Policy on Education. Lagos: NERDC Press.
- Hafiz, H., & Sa'ad, G. (2015). Assessing the richness of entrepreneurship education curriculum content: Empirical evidence. Journal of Research & Method in Education, 5(2) 107-114
- Harms, H., Stehr, B.W., & Harris, E.E. (2011). Methods of teaching business and distributive education. Cincinnati: South-Western Publishing Co.
- Ibrahim, A. (2014). Assessment of the adequacy of university students' business education curriculum content for the acquisition of requisite job skills and job opportunities in Nigeria. *Unpublished Ph.D Dissertation*, Department of Vocational and Technical Education, Faculty of Education, Ahmadu Bello University, Zaria
- Ile, C.M., & Ementa, C.N. (2016). Appraisal of information and communication technology courses in business education programme of universities in South East Nigeria. *International Journal of Higher Education*, 5(1), 200 – 207
- Johnson, P.D. (2010). Entrepreneurial success: An integrative study of team climate for innovation, group regulatory focus, innovation performance and success. *Unpublished Ph.D Dissertation*, University of Oklahoma
- Karpak, B., & Topcu, L. (2010). Small medium manufacturing enterprises in Turkey: An analytic network process framework for prioritizing factors affecting success. *Int. J. Prod. Econ.* 125, 60-70
- Mihai, K. (2010) Graduate labour market mismatches: New features of an older matter. Review of Economic and Business Studies, Alexandru-Ioan Cuza University, Faculty of Economics and Business Administration, 5, 13-22.
- National Commission for Colleges of Education (2012).*Minimum standards for NCE* Vocational and Technical Education. Abuja: NCCE
- Ohakwe, S.N., & Njoku, S.C. (2009).Curriculum standards, business environment and national development. Tripartite issues in office education. *Book of Reading in Business Education*, 1(9), 74 – 85

- Okoro, J. (2015). Assessment of management competencies possessed by the university postgraduate business education students to handle entrepreneurship business challenges in Nigeria. *Journal of Education and Practice*, 6(18), 129 136.
- Onokpaunu, M. O. (2016). Analysis of web-based instructional technologies for use by business education lecturers in tertiary institutions in Delta State. Unpublished Masters' Thesis, Department of Vocational Education, Faculty of Education, Nnamdi Azikiwe University, Awka.
- Ubulom, W.J., & Enyoghasim, M. (2012).Developing entrepreneurial skills through business education programme to curb youth restiveness for sustainable Niger Delta development. *European Journal of Business and Management*, 4(21), 68-75

References

- Abdulrahaman, M. (2014).Principals' administrative process strategies for the achievement of quality assurance in secondary schools in Kogi State.*Unpublished masters' thesis*, Department of Educational Foundations, Faculty of Education, University Of Nigeria, Nsukka
- Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., & Kashy, D. A. (2011). What does the Narcissistic Personality Inventory really measure? *Assessment*, 18, 67–87.
- Alghamdi, A.R. (2016). Test anxiety: Concept and implication. *Journal of Nursing* and Health Science, 5(3), 112-115
- Arigbabu, A. A., & Mji, A. (2004). Is gender a factor in Mathematics performance among Nigerian pre-service Teachers? Sex Role, 51 (12), 749 – 754
- Chakra, B. K. (2016).Effectiveness of teaching Economics in higher secondary school level, Nepal. *Economic Journal of Development Issues*, 21 & 22, (1-2), 99 126.
- Colquhoun, L.K., & Bourne, P.A. (2012).Self-esteem and academic performance of 4th graders in two elementary schools in Kingston and St. Andrew, Jamaica. *Asian Journal of Business Management*, 4(1), 36-57.
-]]]
- Federal Republic of Nigeria (2013). *National policy on education*. Lagos: NERDC Publishers.

Gibson, H.A. (2014). A conceptual view of test anxiety. Nurs Forum, 49(4), 267-77.

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NAU Journal of Technology & Vocational Education Vol.3 No.1 2018. All Rights Reserved. http://www.naujtved.com.nq

- Guay, F., Marsh, H.W., & Boiving, M. (2003). Academic self concept and achievement: developmental perspective on their causal ordering. *Journal of Educational Psychology*, 95, 124-136.
- Iroegbu, M.N. (2013). Effect of test anxiety, gender and perceived self-concept on academic performance of Nigerian students. *International Journal of Psychology and Counselling*, 5(7),143-146
- Liu, J.T., Meng, X.P., &Xu, Q.Z. (2006). The relationship between test anxiety and personality, self-esteem in grade one senior high students. *PubMed*,40(1), 50 62
- Nworgu, B. G. (2015). *Educational research: Basic issues and methodology*. Nsukka: University Trust Publishers.
- Rezazadah, M, & Tavakoli, M. (2009).Investigating the relationship among test anxiety, gender academic achievement and years of study: A case of Iranian EFL University students.*English Language Teaching*, 2(4) 68-74.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Sar, S.A., Bilek, G., &Çelik, E. (2017).Test anxiety and self-esteem in senior high school students: a cross-sectional study. Nord J Psychiatry, 72(2), 84-88.
- Sowislo, J.F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychol Bull.*, 139(1), 213–40
- Tekta, O.Y., Paulsen, F., &Sel, S. (2013).Test anxiety among German medical students and its impact on lifestyle and substance abuse. *MedTeach*, 35(11), 969-1003
- West African Examination Council (WAEC) (2017). *Chief Examiner's Report on Students Performance in Senior SchoolCertificate Economics Examination*. West African Examination Council Lagos, Nigeria

BUSINESS EDUCATION GRADUATE ENTREPRENEURS' RATING OF FINANCIAL MANAGEMENT AND INNOVATIVE THINKING SKILLS UTILIZATION IN ENTREPRENEURAL VENTURES IN NORTH CENTRAL STATES, NIGERIA

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Abstract

The study investigated NCE business education graduate entrepreneurs' ratings of financial management and innovative thinking skills utilization in entrepreneurial ventures in North Central States, Nigeria. The study which employed a descriptive survey identified two entrepreneurial skills which were financial management and innovative thinking skills. Two research questions and two hypotheses were formulated for the study. The entire registered 149 NCE business education graduate entrepreneurs operating in the North Central States, Nigeria constituted the population of the study. There was no sampling since the entire population was considered manageable. 30-item structured questionnaire titled Questionnaire on Entrepreneurs' Rating of Entrepreneurial Skills Utilization in Entrepreneurship (OERESUE) was adopted for the study. The reliability of the instrument was ascertained using Pearson Product Moment Correlation Coefficient to obtain rcoefficient of 0.77 and 0.82, respectively for clusters B1 and B2 of the questionnaire. The questionnaire was distributed to the 149 NCE business education graduate entrepreneurs in the North Central States, Nigeria. Four copies of the questionnaire were not returned and so 145 copies were used for the study. The research questions were analyzed using descriptive statistics of mean and standard deviation. t-test and ANOVA were used to test the null hypotheses of the study at a 0.05 level of significance. The findings of the study revealed that financial management skills were sometimes utilized in entrepreneurship, while Innovative thinking skills were often used. With respect to the findings, the following recommendations were put forward, among which was that institutional authorities in collaboration with the National Commission for Colleges of Education (NCCE) should, as a matter of policy institute regular training in entrepreneurial skills development for all teachers of business education to enable them acquire adequate knowledge of financial management skills and innovative thinking skills so as to be in a better position to impact it effectively for optimal utilization.

Key Word: Skills, Entrepreneurship, Financial Management Skills, Innovative Thinking Skills

Introduction

Entrepreneurship is the ability of an individual to be innovative and enterprising. Entrepreneurship refers to individual ability to turn ideas into action. It includes creativity, innovation and risk taking as well as the ability to manage projects in order to achieve the objectives of the business venture. It also involves the formation and management of a new business entity (Offiong, Caleb & Effiong, 2017). It is a process of generating sound investment ideas and applications thereof. The applications may be in creating new firms, new jobs, new relationships, and new methods of production or new ways of doing things generally or modifying and improving on the existing ones to enhance their value. On the other hand, entrepreneurship education aims at raising awareness of students about business skills, knowledge, promoting creativity, innovation and self-employment. This includes the acquisition of skills in areas that will be useful to make them self-reliant, independent and productive citizens of the society (Offor, 2013).

On the other hand, business education has the capacity to make the recipient self-reliant if they are exposed to the relevant entrepreneurial skills such as financial management and innovative thinking skills. Onyesom and Umoeshiet (2013) described business education as the aspect of educational training which an individual receives with the primary motive of enabling the individual acquire adequate attitudes, concepts, knowledge, understanding and skills in business activities for vocational usage. According to Nwokike (2017) business education is an aspect of vocational education which equips individual with the necessary skills and theoretical knowledge needed for performance in the business world either for paid job or self – employment. Osuala (2009) opined that as producers and consumers of goods and services, Nigerians need increased knowledge of business theories, skills, and practices so that they may select wisely from among vast qualities of products, services, and investment opportunities.

The objectives of business education include among others provision of training that will result in developing individuals who are capable of becoming successful entrepreneurs. An entrepreneur can be described as one who coordinates other factors of production and bears the risk of uncertainty by investing scarce resources in a business endeavour. Shaibu and Mmeremikwu (2017) described an entrepreneur as an individual who possesses the skills and competencies of finding and examining business chances, assembles the resources and carry out actions to take advantage of the opportunities. This implies that an entrepreneur is not just a person who starts a business, but one who goes beyond that to apply an endless variety of special talents and ideas to the whole assortment of circumstances associated with small and medium enterprises.

According to Yunus (2010) entrepreneur can be male or female. Thus, gender affects entrepreneurship. Consequently, businesses owned and managed by female entrepreneurs operate differently from those owned and managed by male entrepreneurs. Women generally are more focused on balancing work and family, while men are more motivated to making wealth through business ownership. Men are most likely to participate in entrepreneurial activities than women.

Business education graduates at NCE level comprises male and female. In line with the National Commission for Colleges of Education (NCC.E) Minimum Standards for Vocational and Technical Education (VTE), these NCE business education graduates specialize in either accounting education option or office technology and management education (OTM) option. In the preparation of these NCE graduates of business education, it is a requirement that they are exposed to entrepreneurship in business education. The essence of this is to acquaint business education undergraduates with the necessary entrepreneurial skills required for various entrepreneurship engagements. According to Ibrahim (2017), these entrepreneurial skills include among others, financial management skills and innovative thinking skills.

Financial management skills are essential in entrepreneurship of any kind. According to Nwaizugbo and Anukam (2014), it is the capacity and ability of an entrepreneur to use relevant knowledge and understanding to manage unexpected or unpredictable situations to solve financial problems and convert it to a benefit and opportunity to one's advantage. Financial management skills include budget drafting, understanding of financial concepts and statements, financial reporting, knowledge of simple business law and so on.

On the other hand, innovative thinking skills are also referred to as creative thinking skills and it is an essential ingredient in entrepreneurship. Ezenwafor and Olaniyi (2017) defined innovative thinking skills as skills needed for the successful implementation of creative ideas within an organization. Innovative thinking skills involve the introduction of new products, new methods of production, opening new markets, exploring new sources of supply of raw materials and carrying out a new type of organization. Innovative thinking skills make it possible to turn business problems into business opportunities.

There is no doubt that individual proposing to start a business needs a broad array of skills for the business to succeed in the competitive market. Skills are usually acquired or learned through training or experience. Okoli (2013) saw skills as the economic tools with which entrepreneurs confront and solve social problems. Skills are practical ac4tivities which make one employable, self-reliant and relevant to the society. The author further stated that entrepreneurs must possess these skills to enable them to start their own business. Ezenwafor and Olaniyi (2017) saw skills are practical activities which make one employable, self-reliant and relevant to the society. The present-day uneemployment situation has shown that graduates need

skills to create jobs rather than skills to fill existing vacancies. Related skills are required to perform specific tasks successfully. Skills for operating a business enterprise are needed for the business to succeed in the competitive market. Skills are usually acquired through training and experience. Skills utilization is the application of the entrepreneurial skills in entrepreneurial ventures by entrepreneurs. In other words, skills utilization refers to the matching of the skills possessed by business education graduates with the skills needed in entrepreneurship. It follows, therefore, that NCE business education graduate entrepreneurs must learn and utilize entrepreneurial skills such as financial management skills and innovative thinking skills to be able to establish, manage and sustain any form of entrepreneurship.

Business education graduate entrepreneurs in this study refer to NCE graduates of business education who are currently involved in entrepreneurship activities such as service based, manufacturing based and trading (buying and selling) based businesses and are domiciled in the six North Central States of Nigeria and are registered with the state ministries of commerce and industry. Entrepreneurship in this study refers to businesses, ventures or enterprises established, owned and managed by NCE business education graduates.

Although most of the graduates of NCE business education programme end up becoming teachers, a good number of them also, settle for a career in various entrepreneurship activities. With the entrepreneurial skills, they have been equipped with, to what extent do the NCE business education graduate entrepreneurs utilize financial management skills and innovative thinking skills they acquired in training in their businesses.

Statement of the Problem

Graduate unemployment in Nigeria, occasioned by growing economic downturn demand that all panaceas be identified and re-enforced in the interest of national development. The Federal Government in the realization that paid employment cannot be provided for all graduates introduced entrepreneurship education for undergraduates of all programmes in tertiary institutions with the belief that this will reduce unemployment, enhance self-reliance and accelerate national development, (Ezeonwurie, 2017).

It is a fact that NCE graduates of business education are taking to the option of self-employment in form of entrepreneurial activities/ventures (entrepreneurship), drawing from the skills they were exposed to during training to succeed, the unemployment situation does not seem to be decreasing especially in respect to NCE business education graduates. According to Okoye and Udemba (2015), it is evident that many graduates of business education still roam the streets in search of non-existent white collar jobs. This situation raises a question about the effectiveness of the entrepreneurship education programme in business education which they were exposed to.

Entrepreneurship education was designed to teach the students attitudes and skills needed for productive entrepreneurial engagements. Such skills include financial management skills and innovative thinking skills. However, little is known about the extent to which the skills are useful or are being utilized in their various businesses. Observations and anecdotes suggest that in the North Central States of Nigeria, many of the NCE business education graduates are engaged in one form of entrepreneurial activity or the other. The question, however, is to what extent are they utilizing the various entrepreneurial skills acquired in the course of their studies? If answers are not provided to the question, colleges of education may continue to emphasize skills that are not all that useful in real-life entrepreneurship while neglecting those which are indispensable. Moreover, businesses may fail, and unemployment may continue to rise. Therefore, this study determined how NCE business education graduate entrepreneurs rate the extent of their utilization (application) of financial and innovative thinking skills in day to day running of their businesses/ventures.

Purpose of the Study

The main purpose of the study was to determine the extent business education graduate entrepreneurs rate their utilization of financial management skills and innovative thinking skills in entrepreneurial ventures in the North Central States, Nigeria. Specifically, the study determined:

- 1. business education graduate entrepreneurs' rating of the extent of their utilize financial management skills in entrepreneurial ventures in North Central States of Nigeria.
- 2. business education graduate entrepreneurs' rating of the extent the utilization of innovative thinking skills in entrepreneurship.

Research Questions

The following research questions guided the study:

- 1. What is the business education graduate entrepreneurs' rating of the extent of utilization of financial management skills in their entrepreneurial ventures?
- 2. What is the business education graduate entrepreneurs' rating of the extent of utilization of innovative thinking skills in entrepreneurial ventures?

Research Hypotheses

The research hypotheses stated below were tested at 0.05 levels of significance.

- Ho₁ Business education graduate entrepreneurs do not differ significantly in their ratings of the extent of financial management skills utilization in entrepreneurial ventures based on gender.
- Ho₂. Business education graduate entrepreneurs do not differ significantly in their ratings of the extent of innovative thinking skills utilization in entrepreneurial

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ventures based on the business type (service, manufacturing and trading i.e buying and selling based businesses).

Method

The design adopted in this study was descriptive survey. The study was carried out in North Central States of Nigeria. The choice of the area was because of the fact that they have vast potential for entrepreneurship opportunities as well as several colleges of education offering business education at Nigeria Certificate in Education (NCE) level. The primary interest of this study was to assess business education graduate entrepreneurs' ratings of the extent of their utilization of financial management skills and innovative thinking skills in entrepreneurship (business ventures). Population of the study comprised 149 registered NCE business education graduate entrepreneurs operating their business in Benue, Kogi, Kwara, Nasarawa, Niger and Plateau states and whose business enterprise was registered with ministry of commerce and industry of the states of the study.

Samples were not drawn because the population was relatively small and manageable. The instrument used for data collection was a structured 30-item questionnaire titled: Questionnaire on Entrepreneurs' rating of Entrepreneurial Skills Utilization in Entrepreneurship (QERESUE) The instrument was a 5-point Likert type rating scale. The instrument was face validated by three experts both in business education and in test and measurement of the Kwara State University, Malete. A pilot study was carried out in Edo State. The reliability of the instrument was ascertained using Pearson Product Moment Correlation Coefficient (r) to obtain the r-coefficient of 0.77 and 0.82 for the two clusters of the instrument to determine the stability of the response over time. The researchers adopted personal contact approach of data collection. The questionnaire was distributed to the 149 registered NCE business education graduate entrepreneurs in the North Central States, Nigeria. Four copies of the questionnaire were not returned and so 145 copies was used for the study. Data collected for the study were analyzed using descriptive and inferential statistics. The descriptive statistics computed included mean, standard deviation and ranking, while the inferential statistics computed were t-test and analysis of variance (F-ratio). The ttest and F-statistics (ANOVA) were tested at 0.05 level of significance.

Results:

Research Question One

What is the business education graduate entrepreneurs' rating of the extent of their utilization of financial management skills in entrepreneurship?

Data collected in respect of this research question is presented in table 1.

Table 1

Business Education Graduate Entrepreneurs' Ratings of the items on the extent of their utilization of Financial Management skills

	(N = 145)									
S/N	Indicate the extent to which you utilize the	\overline{x}	SD	Rank	Remarks					
	following financial management skills									
1.	Sourcing for capital to start business.	3.76	0.69	2	OU					
2.	Preparing simple financial inventory for the business	3.42	0.98	4	SU					
3.	Preparing annual budget for the business.	2.24	0.60	14	RU					
4.	Evaluating business operational plans and performance.	3.07	1.10	5	SU					
5.	Understanding simple tax laws and regulations to									
	avoid over-taxation.	2.98	1.04	11	SU					
6.	Understanding daily financial position of the business	3.02	1.06	7	SU					
7.	Budget drafting and financial reporting.	2.22	0.69	15	RU					
8.	Maintaining and keeping necessary books of account									
	for the business.	3.00	1.07	8	SU					
9.	Effective fund allocation among competing units of									
	the firm.	3.63	0.72	3	OU					
10.	Reviewing and understanding financial statements of									
	accounts of the business.	2.92	097	12	SU					
11.	Assessing the financial worth of the business.	3.06	0.98	6	SU					
12.	Understanding lending policy of banks and other									
	lending institutions.	3.00	1.05	9	SU					
13.	Knowledge of simple financial laws and regulation									
	of the business.	2.99	1.00	10	SU					
14.	Determining employee's wages and fringe benefits									
	in relation to employee's contribution to the success	3.86	0.69	1	OU					
	of the firm.									
15.	Seeing the business as a separate entity and									
	distinguishing personal expenditure from that of the	2.92	0.98	13	SU					
	business.				~ -					
	Grand Weighted Mean	3.07	0.91		SU					

Source: Field Survey, 2019.

Key: VOU = Very Often Utilized; OU = Often Utilized; SU = Sometimes Utilized; RU = Rarely Utilized; NO = Not Utilized

The maximum and minimum means computed are 3.86 (item 14) and 2.22 (item 7) with standard deviations of 0.69 each. The respondents rated the items as sometimes utilized in the following order: 2, 4, 11, 6, 8, 12, 13, 5, 10 and 15 on the financial management skills cluster with mean scores of 3.42 to 2.92 except items 14, 1 and 9 which they rated often utilized, while items 3 and 7 were rated rarely used.

Items 14, 1, 9, 2, and 4 in that order were rated highest, while items 7, 3, 15, 10 and 5 accordingly have the least means. The other items (6, 8, 11, 12 and 13) fall in-

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between the two groups. The grand weighted mean of 3.07 indicate that the entrepreneurs on the average rated financial management skills as sometimes utilized by them with their opinions fairly homogenous.

Research Question Two

What is the business education graduate entrepreneurs' rating of the extent of their Utilization of innovative thinking skills in entrepreneurship?

Data collected in respect of this research question are presented in Table 2.

Table 2:

Business Education Graduate Entrepreneurs' Ratings of the items on the extent of their Utilization of Innovative Thinking Skills

(N = 145)							
S/N	Indicate the extent to which you utilize the following innovative thinking skills.	x	SD	Rank	Remarks		
16.	Ability to introduce new products with additional	3.74	0.71	6	OU		
17	values.	2.62	0.66	0	011		
17.	Ability to generate new business ideas to grow the business	3.63	0.66	8	OU		
18.	Ability to introduce new methods of production to						
	ensure increase in employees' productivity.	3.63	0.70	9	OU		
19.	Combining ideas and knowledge into new values.	3.75	0.69	4	OU		
20.	Exploring new and cheaper sources of supply of raw						
	materials	3.75	0.69	5	OU		
21.	Identification and discovering new customers and						
	markets for my products and or services.	3.86	0.70	1	OU		
22.	Identification and employment of new technology in						
	running the business.	3.21	1.04	14	SU		
23.	Addition of value to customers' satisfaction to retain						
	their patronage.	3.74	0.89	15	SU		
24.	Always meeting customers' needs and avoiding out of						
	stock syndrome.	3.76	0.69	2	OU		
25.	Creating curiosity in the minds of customers to try out						
	my products/services.	3.62	0.70	10	OU		
26.	Demonstrate imaginative thinking to improve on the						
	old methods of operating the business.	3.22	0.82	13	SU		
27.	Developing new plans and strategies for goal	3.60	0.70	12	OU		
	attainment.						
28.	Identifying and pursuing new business opportunities.	3.62	0.71	11	OU		
29.	Setting attainable business goals and objectives for						
	better performance and improved returns.	3.76	0.69	3	OU		
30.	Identification and opening new markets and improved				OU		
	patronage for my product/service.	3.73	0.68	7			
	Grand Weighted Mean	3.60	0.74		OU		

Source: Field Survey, 2019.

Key: VOU = Very Often Utilized; OU = Often Utilized; SU = Sometimes Utilized; RU = Rarely Utilized; NO = Not Utilized

In Table 2, the means, standard deviation, rank, and interpretations of business education graduate entrepreneurs' rating of the extent of their utilization of each item on innovative thinking skills is presented. The highest and lowest means computed are 3.86 (item 21) with a standard deviation of 0.70 and 3.14 (item 23) with a standard deviation of 0.89 respectively. The entrepreneurs rated in descending order, items (21, 24, 29, 19, 20, 16, 30, 17, 18, 25, 28, and 27) on this cluster with means ranging between 3.86 to 3.60 as often utilized. Items 26, 22 and 23 with mean scores of 3.22. 3.21 and 3.14 respectively are rated as sometimes utilized.

Items 21, 24, 29, 19 and 20 in that rank order top the rating, while items 23, 22, 26, 27 and 28 in that order were considered least in the scores of innovative thinking skills utilization. The other five items (16, 30,17,18 and 25) occupy the middle of the ranking. On the whole, the grand weighted mean of 3.60 shows that the entrepreneurs generally rated innovative thinking skills as often utilized.

Hypotheses Testing

Ho₁: Business education graduate entrepreneurs do not differ significantly in their rating of the extent of financial management skills utilization in entrepreneurship on the basis of sex.

Table 3:

Summary of t-test Analysis showing the Difference between Mean Ratings of Male and Female Business Education Graduate Entrepreneurs on their Utilization of Financial Management Skills

Gender	n	\overline{x}	Sd	<u>t</u>	sig. level	conclusion
Male	86	44.52	6.69	1.000	0.015	NG
			<	-1.008	0.315	NS
Female	59	45.66	6.67			
		P<0.0	05 *NS	\equiv Not Si	gnificance	

Table 3 shows the t-test analysis of the hypothesis tested. The Table shows that the computed t-value of -1.008 is significant at 0.315 level. Since this level of significance is greater than the hypothesized fixed significant level of P<0.05, the stated hypothesis is accepted. Therefore, this shows that there is no significant difference between male and female NCE business education graduate entrepreneurs in their ratings of the extent of their utilization of financial management skills in their business.

H0₂: Business education graduate entrepreneurs do not differ significantly in their rating of the extent of innovative thinking skills utilization in entrepreneurship on the basis of business type.

Table 4:

Summary of ANOVA showing Significant Difference in the Mean Ratings of Business Education Entrepreneurs on Innovative Thinking Skills Based on Business Type

Business type		n		\overline{x}	S	
Service		82		60.50	5.38	
Manufacturing		25		62.00	4.48	
Trading (buying &	selling)	38		60.56	5.32	
	-					
Source	Df	Ss	Ms	f-ratio	sig. level	conclusion
Between groups	2	45.60	22.80	0.837	0.435	NS
2000 Con Broups						
Within groups	142	3869.90	27.25			

P < 0.05, NS \equiv Not Significance

The descriptive statistics (frequency, mean and standard deviation) are presented on Table 4. Service based, manufacturing based and trading (buying and selling) based entrepreneurs have mean scores of 60.50, 62.00, 60.56 and corresponding standard deviation of 5.38, 4 48, 5.32 respectively.

Table 4 shows the result of the ANOVA test of the stated hypothesis. The computed f-ratio of 0.837 is significant at level 0.435 significance level. Since the significance level of 0.435 is greater than the hypothesized (alpha level) significance level of P<0.05, the hypothesis is therefore accepted. It is concluded that there is no significant difference in the rating of the extent of their utilization of innovative thinking skills among NCE business education graduate entrepreneurs doing different businesses.

Discussion of Finding

The study determined business education graduate entrepreneurs' rating of the extent of their utilization of entrepreneurial skills in their businesses. Two entrepreneurial skills were examined in the study namely financial management skills and innovative thinking skills.

The result of the study indicates that business education graduate entrepreneurs sometimes utilized the skills of financial management. This is in spite of the fact that financial management skills is seen by Pandy (2004) as one of the most important and potent tools for successful entrepreneurship. Ikeanyionwu and

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Ekwue (2013) also believed that financial management skills are highly needed for effective management of enterprises. Financial management skills are indispensible for successful entrepreneurship (Ademiluyi, 2007; Ezenwafor, 2014). The finding that NCE business education graduate entrepreneurs sometimes utilized financial management skills as against the position of previous similar studies, (Ademiluyi, 2007; Eze & Agbili 2016; Okeke-Okonkwo, 2017) whose subjects rated financial management skills as highly needed in entrepreneurship calls for improvement in the delivery of entrepreneurship education to ensure proper utilization of financial management skills.. This finding may be indicative of a number of issues with NCE business education graduate entrepreneurs and their training. One is that they may lack adequate competence in financial management skills (Oduma, 2010). Secondly, the finding may call to question the relevance and effectiveness of their training (Akarahu & Baba 2011; Ibrahim, 2017).

The findings of the study also revealed that there was no significant difference in male and female NCE business education graduate entrepreneurs' ratings of the extent of their utilization of financial management skills, is in tandem with Eze and Agbili's (2016) finding that business education graduate entrepreneurs do not differ in their view of the extent of financial management skills utilization based on sex. In actual fact, male and female entrepreneurs face the same challenges in business and are also expected to tackle them alike.

The study also revealed that NCE business education graduate entrepreneurs rated innovative thinking skills as a skill they often utilized in their businesses. The above revelation is in accordance with that of Nwazor and Odigili (2015) who found that small and medium scale business operators in Delta State rated critical personal skills (innovative thinking skills inclusive) as a highly needed competence. Eze and Agbili (2016) also found conceptual, organizing and strategic competencies, which are synonymous to innovative thinking, to be highly needed. The present findings agreed more directly with the findings of Olaniyi (2016), whose subjects rated innovative thinking skills as highly needed by business education graduate entrepreneurs for entrepreneurial success. This finding strongly underscores the place of innovative thinking skills in effective and successful entrepreneurship. Of course, an entrepreneur who lacks innovative thinking skills will not be able to establish, manage and sustain his business.

It was also found that business education graduate entrepreneurs do not differ significantly in their rating of the extent of utilization of innovative thinking skills on the basis of business type. It is quite apparent that all businesses, irrespective of type would have their challenges and the entrepreneur would have to draw on this skill to solve them. Nwazor and Odigili (2015) similarly found that small and medium scale business operators in Delta State do not differ in their rating of critical personal skills (subsuming innovative thinking skills) for entrepreneurship of any kind.

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Conclusion

Based on the findings of this study, it is concluded that business education graduate entrepreneurs, irrespective of their background rated innovative thinking skills as skills often utilized by them in their businesses. Financial management skills were rated by business education graduate entrepreneurs as skills they sometimes utilize in their business. It follows therefore, that there is need to strengthen the teaching of financial management skills to business education students to enable them utilize it optimally in their various businesses after graduation.

Recommendations

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

- 1. Institutional authorities in collaboration with the National Commission for Colleges of Education (NCCE) should, as a matter of policy make annual training in entrepreneurial skills development compulsory for all teachers of business education to enable them acquire adequate knowledge of financial management skills and innovative thinking skills so as to be in a better position to impact it effectively on the business education students.
- 2. The entrepreneurial skills identified in this study viz; financial management skills and innovative thinking skills should be included in the course content of entrepreneurship education programme in business education by the relevant authorities. These skills should be taught to all business education students irrespective of their preferred option. This, no doubt, will enhance the acquisition and utilization of these skills for effective and gainful management of businesses by business education graduates.
- 3. The Association of Business Educators of Nigeria (ABEN) should float training programmes in the form of workshops, seminars and conferences on entrepreneurial skills acquisition and utilization so as to build and enhance the capacity of business education teachers, business education students, entrepreneurs and business education graduates who may wish to engage in the establishment of their own businesses..
- 4. There is need for government to carry out public awareness and enlightenment programme on the importance of entrepreneurship and entrepreneurial skills developments, acquisition and utilization. This would ensure effective participation of stakeholders in the execution of entrepreneurial skills development programme in colleges of education.

References

- Ademiluyi, L.F. (2007). Business competencies needed for effective entrepreneurship as perceived by fresh graduates. *Business Education Journal*, 4(3), 18-29.
- Akarahu, C.U. & Baba.K. (2011).Entrepreneurial competencies required by office education graduates of colleges of education for self-sustainability in South East, Nigeria. *Business Education Journal*, 8(1), 192-205.
- Eze, T.I. & Agbili, C.C. (2016). Determination of competencies needed and utilized by business education graduates for entrepreneurial success in Anambra State NAU Journal of Technology and Vocational Education (NAU JTVE), 1(1), 143-150.
- Ezeonwurie, O.A. (2017). Strategies for improving entrepreneurship education in Nigeria: Evidence from entrepreneurship teachers in Katsina State. *Nigeria Journal of Business Education*, 4(1), 123-132.
- Ezenwafor, J.I. (2014). Entrepreneurial skills. In Egboh, E.A. & Ile, C.M. (ed.). *Foundational Issues in Entrepreneurship.An overview*. Chike Okoli Centre for Entrepreneurial Studies, NNamdi Azikiwe University, Awka. Onitsha: Nuben Press Ltd. 25-48.
- Ezenwafor, J. I. & Olaniyi, .N. (2017). Rating skills needed by business education graduates for entrepreneurial development in South West Nigeria. International Journal of Entrepreneurship Development Education and Science Research, 4(1), 165-169.
- Ibrahim, M.Y. (2017). Influence of business education curriculum on entrepreneurship of graduates of colleges of education in North Central geopolitical Zone, Nigeria. Unpublished Doctoral Thesis presented to the Department of Vocational Education, Ahmadu Bello University, Zaria.
- Ikeanyionwu, C. I & Ekwue, K.C (2013). Introduction of entrepreneurship education in business studies curriculum of junior secondary schools in Onitsha L.G.A. of Anambra State: Implication for qualiy assurance.*Nigeria Journal of Business Education.* 1(2), 344-350.
- Nwaizugbo, I.C & Anukam, A. I. (2014). Assessment of entrepreneurial marketing practices among small and medium scale enterprises in Imo State Nigeria: Prospects and Challenges. *Review of Contemporary Business Research*, 3(1), 77-98.
- Nwazor, J.C. & Odigili, C.B. (2015). Determination of entrepreneurial skills needed by university business education graduates for successful entrepreneurship in Delta State.*NAU Journal of Technology & Vocational Education (NJTVE)*, 1(2), 86-95.
- Nwokike, F.O. (2017). Promoting entrepreneurship in business education programme in universities in South East Nigeria. *Nigeria Journal of Business Education*, 4(1), 112-119.
- Oduma, C.A. (2010). A survey of employers' expectations of work competencies needed by business education graduates for gainful employment in

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organization. Journal of Business Education Research and Development, 1(1), 123-131.

- Offiong, M.A. Caleb, E.E, & Effiong, A.A.(2017). Strategies for integrating ICT in entrepreneurial education in tertiary institutions.*Nigerian Journal of Business Education*, 4(2), 254-261.
- Offor, E.I.D. (2013). Enhancing entrepreneurship programme for solving unemployment problems. In Kpangban, E., Eya, P.E. & Igbojinwaekwu, P.C.(ed.). Reforms and Innovation in Nigeria Education. Onitisha: West and Solomon Publishing Coy Ltd. 108-121.
- Okeke-Okonkwo, C.I. (2017). Entrepreneurial competencies required of business education graduates for establishing small and medium scale enterprise in Anambra State. An unpublished project submitted to the Department of Technology and Vocational Education, Faculty of Education, Nnamdi Azikiwe University, Awka.
- Okoli, B.E. (2013). The entrepreneurial skill needs of business education students in information and communication technology driven business environment..*Journal of Business and Vocational Education*, 2(1), 97-104.
- Okoye, K.R.E. & Udemba, N.F. (2015). Business educators' rating of measures for making tertiary business education graduates self-employed in South East Nigeria. NAU Journal of Technical &Vocational Education (NJTVE), 1(2), 38-46.
- Olaniyi, O.N. (2016). Small and Medium Enterprises Managers, Rating of Skills Needed by Business Education Graduates for Entrepreneurial Success in Ondo and Ekiti States. Unpublished Ph.D Thesis submitted to the Department of Vocational Education, Faculty of Education Nnamdi Azikiwe University, Awka.
- Onyesom, M. & Umoeshiet, E.A. (2013). Strategies considered effective for quality assurance in business education programmes in Nigerian universities. *Nigerian Journal of Business Education*, 1(2), 141-159.
- Osuala, E.C. (2009). *Business and Computer Education*. Enugu: Cheston Agency Limited.
- Pandy, I.M. (2004). Financial management. New Delhi: Vikas Publishers
- Shaibu, O.G. & Mmeremikwu, F.C. (2017). Entrepreneurship education in Nigeria: A panacea for youth empowerment and employment generation. *Nigeria Journal* of Business Education, 4(2), 39-49