

THE PLACE OF COMPUTER BASED TECHNOLOGY IN THE CURRICULUM OF COLLEGES OF EDUCATION IN NIGERIA

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ABSTRACT

This paper is focused on the Business Teacher Education Programme of the Colleges of Education in Nigeria and the need to ensure the production of effective and efficient teachers with Nigerian Certificate in Education (N.C.E.) The human and material resources available in the Colleges of Education, their quantity, quality, maintenance and progressive upgrade were critically examined in the light of the objectives of setting up the colleges. Relevant strategies for enhancing the input and output of the colleges were suggested to include application of computer based technology like Database Management, Power point presentation etc. It was concluded that products or graduates of the Colleges of Education in Nigeria will be effective and efficient in proportion as they are trained using the right quality and quantity of human and material resources provided in appropriate environments. It is recommended that Federal and State governments and private proprietors of Colleges of Education should endeavor to provide conducive teaching and learning environment; quality and quantity human and material resources sufficient enough to ensure production of effective and efficient teachers for business subjects in the junior and senior secondary schools in the country.

Keywords: Computer, technology, resources, teaching and learning.

1. INTRODUCTION

Business education is one of the vocational education programmes that train the recipients on business skills and competencies required for efficient and effective performance in their private businesses, gain employment opportunities in offices or teach any of the business subjects. Business education according to Aliyu in Azih (2012) is education for the acquisition and development of attitudes, skills and competencies, attitudes which are necessary for efficiency of the economic system. In Nigeria, business education is offered in the universities and other degree awarding institutions as well as Colleges of Education. Colleges of Education offer Nigerian Certificate in Education (N.C.E.) to all the graduates of the programme. N.C.E graduates that studied business education are referred as business teachers.

Business teacher education provides its recipients with the necessary competencies to teach business subjects; as well as general and professional education courses that prepares the graduates on the pedagogy of teaching these business subjects/courses, in addition provides industrial training programme

where the students practice the skills learnt in a work environment which is a replica of the job environment where he expects to work in future. National Commission for Colleges of Education which is the body that oversees the affairs of Colleges of Education in Nigeria stated the following as the objectives of business education for Colleges of Education:

- To produce well qualified and competent N.C.E graduates in business subjects who will be able to teach business subjects in our secondary schools and other related educational institutions.
- To produce N.C.E. business teachers who will be able to inculcate the vocational aspects of business education in the society.
- To produce N.C.E. business teachers who will be involved in the much desired revolution of vocational development right from the primary and secondary schools.
- To equip students with necessary competencies so as to qualify them for a post-N.C.E degree programme in business education.
- 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 (FRN, 2008).

Business education programme in the Colleges of Education cover two options namely: secretarial and accounting options. Secretarial education as defined by the National Board for Technical Education (NBTE) is the type of Education that equips beneficiaries with vocational skills, effective work competencies and socio-psychological work skills essential for inter-personal relations (NBTE, 2004) Secretarial Education provides the recipients with the needed skills, knowledge and competencies to function well in their place of work. In other words, Secretarial Education is a vocational programme that is offered in secondary and tertiary institutions primarily to educate and train students to become competent clerical workers secretarial teachers and secretarial administrators with appropriate skills and knowledge to take up career positions both in teaching, business and office occupations. As observed by Ezenwafor (2012), Secretarial education, which is an option in business education, is concerned with producing graduates who can quickly access data or information, process, disseminate, store and retrieve for future use as demanded by their employers or supervisors. The secretary's role in ICT is indispensable because the employer in the organization often depend on her to get requisite information promptly for effective managerial decision making.

Igboke (2005) explained that accounting education equips one with the knowledge of recording, analysing, classifying and interpreting financial information as well as the pedagogy required in teaching the skills. N.C.E. graduates that specialized in accounting education specialize in accounting skills as well as the pedagogy of teaching these courses. It is expected that at the end of the three-year N.C.E programme in business education, the recipients will be proficient in secretarial or accounting processes that can either help them to pick up gainful employment to teach, work in the office or to be self-employed. For tertiary institutions in Nigeria offering business education programme to achieve their mandate, the quality of training given to individuals passing through a course or the other should be such that can give adequate skills and information needed in the real work situation.

The world has turned to a global village as a result of the introduction of ICT. We are now in an electronic era where everything is on electronic form. To cope with this new technology, the National

Board for Technical Education which is the body that oversees the affairs of polytechnics in Nigeria, introduced the Office Technology and Management Programme packed with many ICT courses both at the National Diploma level and the Higher Diploma Level. This programme changed the nomenclature of secretarial studies to be Office Technology and Management programme. Consequently N.C.C.E. equally introduced some ICT courses into the business education programme for Colleges of Education. The objectives of the OTM and business education programme for colleges of education are similar yet the content of their curriculum vary to a great extent. A look at the polytechnics programme, show that students are exposed to ICT 1 and 2, Desktop Publishing, Web Page Design and Database Management Systems while available programmes for OTM students of Colleges of Education are Computer Appreciation, Computer Application and Word Processing, even with the few programme yet much have not been achieved in equipping the students with adequate knowledge of ICT.

Chigbuson (2004) pointed out that the mission of business education at the college and university levels is to prepare teachers with the necessary manpower skills for public and private business establishments. She further stated that in preparing teachers for the nations' workforce of today, comprehensive and systematic transformation of teacher education programmes must occur if they are to function as leaders in addressing the challenges of preparing well qualified individuals for the world of work. High performances in the work place require graduates that have the skills, knowledge and values necessary for success in ever changing diverse, technological and competitive markets. This necessitates the need to adequately adopt the emerging technology which is the computer based technology.

2. OVERVIEW OF THE STATE OF BUSINESS EDUCATION PROGRAMME IN COLLEGES OF EDUCATION IN NIGERIA

The current trend in ICT demands that N.C.E. graduates must be conversant with computer based courses. It is stipulated in the National Commission for Colleges of Education Minimum Standards for teachers that one of the objectives of the programme is to produce well qualified and competent N.C.E. graduates in business education who will teach business subjects in our secondary schools and other related educational institutions. A

business educator is expected to develop skills and aptitudes necessary for effective use of the modern technologies for effective service delivery. It is unfortunate to note that the quality of the recipients is not encouraging. Despite efforts by the government to establish valuable and effective teacher education programs in Nigeria for the preparation of competent teachers, it has a fundamental problem which incapacitated its realization. This problem is the lack of adequate ICT infrastructure available in the colleges of education which has reduced access to ICT instructional materials (Adedeji, 2011)

Azih (2012) observed that many students are interested in the programme of business education amidst insufficient provision of few instructional facilities and lecturers for practical work. She further noted that there is continuous transformation in the office equipment used due to the continuous changes in the office duties performed by business education graduates consequent upon high rate of technological advancements.

Although there are business teacher educators available, they lack pre-requisite ICT competencies and these hinder their ability to effectively direct teaching and learning. Bongotons and Onyenwe (2010) observed that the inability of the Colleges of Education to provide enough teaching facilities and equipment poses a serious constraint to effective teaching and learning of the students. Anioke (2011) equally noted that business education programmes in Nigeria in most schools, lack modern teaching facilities, laboratories, workshops and instructional facilities to impact the knowledge and skills needed. She further noted that even when they are available, it is either they are not enough for the learners or obsolete. Colleges of Education in Delta State were also reported to have insufficient ICT teachers (Agbamu, 2005). Chubuike and Igboke (2009) found that ICT is not adequately taught in the Universities and Colleges of Education offering business education. In a study carried out by Adedeji, (2011) on colleges of education in the South Western geo political zone of Nigeria, he discovered that less than 35% of the sampled Colleges of Education use computers. In a study carried out by Nwaiwu and Dikeocha (2013) on the availability and adequacy of modern technological facilities in OTM option of N.C.E Business Education using Alvan Ikoku College of Education as a case study; they found out that the facilities available are inadequate in number and that students are not adequately exposed to the available facilities.

Osuala (2009) stating on how teachers are educated about computer in Nigerian higher institutions, observed that the program is unplanned, and at best only offers a haphazard approach to the subject computer in education. He also stated that the prospective teachers are presented with a show and tell of computer capabilities, a little about everything. The action, he argued may spark their interest but may not provide good depth or insight.

Chukwumezie and Nwogwugwu (2007) equally noted that the products of the higher institutions producing business teacher educators were not receiving pedagogical and manipulative training in ICT. Use of computer is a driving force to ensuring quality delivery of instruction in Colleges of Education. Despite the orchestration of the need for teachers to be ICT compliant, most teachers find it difficult to use these technologies.

Iwe and Ufot (2012) revealed that the business education department in some Colleges of Education and Universities lack adequate computer studio, as a result, these institutions continue with the use of traditional methods of teaching. Consequently, many of the business educators are trained using the traditional equipment like typewriters. It is important that they should be retrained on the use of ICT facilities. It is when they can properly use the facilities that adequate teaching and learning will be obtained in our Colleges of Education.

Agomuo (2004) in Agomuo and Enang (2013) observed that the extent to which the objective of producing disciplined, knowledgeable and devoted business teachers can be achieved depends to a large measure on the effectiveness of the administration provided in the College of Education. It is important to note that adoption of ICT is not providing access to computers and training of the students on the use of computers to type but to ensure that course design and delivery system are in line with the current trend in technology. Chibuike (2013) pointed out that school preparing young people for work need to be sure that their students are prepared to meet the job entry demand of business. Students are naturally not likely to meet these demands unless job standards coincide with terminal education standards.

3. COMPUTER BASED TECHNOLOGY REQUIRED FOR EFFECTIVE TEACHING AND LEARNING OF BUSINESS COURSES

Computer based technology is the form of technology that provides teachers and students with vast quantities of information in an easily accessible format as a result of the use of computer hardware, software, internet, CD-ROM, video etc. These technologies facilitate effective teaching and learning in the classroom. It is therefore imperative that business teachers receive proper training in the use of computer based technologies like, excel spread sheets, data base software, power point presentation software, desktop publishing and usage of internet facilities.

Database management: the term database refers to a collection of data organized for storage in a computer memory and designed for easy access by authorized users (Agomuo, 2005). The use of the database helps to meet the information needs of an organization. It gives you the opportunity to add information to the already existing ones and helps to show the relationships that exist between them. The use of database enables a department of an institution to appropriately store the results of their students for easy retrieval when needed. Registration of students, student's course registration and other personal details of both staff and students can be stored in the institutions data base. Considering the role of business education graduates in performing secretarial/accounting duties based on their area of specialization, it becomes imperative that they should be conversant with data base management for a good service delivery.

Internet: this is a worldwide system of computer network. The Webopedia defined the internet as a global network connecting millions of computers. More than 100 countries are linked into exchange of data, news and options. Unlike on-line services which are centrally controlled, the internet is decentralized by design. With the use of internet, users of one computer in an environment if given the permission can have access to information from computers in other environments. The use of the internet has turned the world into a global village since people from different places and cultural background can exchange ideas and information effectively. The internet affords the lecturers and students an easy access and up to date source of information that will give the trainee the opportunity of gaining access to vast information. Business education students should be conversant with the skills required for effective usage of the internet. The knowledge will help them to reach out to other sources of learning materials outside the ones available in their institutions

environment. Moreover, it will facilitate the use of electronic learning in the various business education departments.

Desktop Publishing is the creation of documents using page layout skills on a personal computer. Desktop publishing software can generate layouts and produce typographical quality text and images comparable to traditional typography and printing. This technology allows individuals, businesses and other organizations to self-publish a wide range of printed material. When used skilfully, desktop allows the user to produce a wide variety of materials from menus to magazines and books without the expense of commercial printing. McGoldrick (2010) stated that desktop publishing allows one to create and design a large variety of printed material and publications, enable the user manipulate, typeset, align image, graphics, page layout with a single integrated system.

PowerPoint Presentation: It is a presentation of series of still images on a projection screen or electronic display device, typically in a pre-arranged sequence. Each image is usually displayed for at least a few seconds, and sometimes for several minutes before it is replaced by the next image. No matter what the topic is PowerPoint presentation can help you communicate an idea to audience. PowerPoint is often used to prepare business presentations as well as presentations of educational materials like seminars and, projects. Lessons can be presented by the teacher using PowerPoint presentation to illustrate a concept or idea especially in the area of teaching accounting and shorthand.

Microsoft excel: is a spreadsheet application developed by Microsoft for Microsoft windows and macros. It features calculation, graphing tools, pivot tables and a macrograph programming language called Visual Basic for applications. This package can be used for the preparation of student's result, financial records of the department, preparation of staff payroll etc. Business education teachers will benefit a lot when they acquire the sub skills involved in using Microsoft excel because it will enhance proper recording of the students' academic records.

There is high competition in business today. ICT has now turned the world into a global village. Many of the industries or parastatals are now automated. Most activities in the school both private and public organizations are conducted in electronic form. This electronic era has ushered in electronic

banking, electronic commerce, electronic marketing, electronic business, electronic accounting, electronic book, electronic library, etc. ICT plays a key role as an enabler to help us better manage the complex information flow and to integrate such information towards effective policy formulation and planning towards the most maximization of human capital and potential in the society (Mac-Ikemeyima, 2005). He further noted that Nigeria is matching towards technological break-through hence educational stakeholders should provide ICT materials in our institutions and these ICT should be properly integrated into schools' curriculum in order to meet the need targets of the country especially now that reform in education is taking place.

It is important that teachers should be sufficiently conversant with the skills they intend their products to acquire and apply in the world of work. Since ICT has become a working tool in most industries and commerce. It is necessary that teachers of business must possess ICT skills if they are to grow professionally and remain relevant (Ihimekpen, 2000). Colleges of education training business teachers are expected to train their graduates to acquire ICT technologies so that on graduation efficient use of the knowledge acquired can be made.

4. CONCLUSION

Graduates of the Colleges of Education in Nigeria will be efficient and effective global workers in proportion as their training is conducted in the right environment, using the appropriate quantity and quality of human and material resources, and using appropriate technologies hence the need for introduction of some computer based courses into the business education programme of the Colleges of Education to equip them properly to compete favourable as a business teacher in this electronic age.

Recommendations

Governments (Federal and state) and proprietors of private Colleges of Education should:

1. Endeavour to periodically upgrade their staff skills by exposing them to seminars, workshops, oversea training programmes.
2. Enter into partnership with similar educational institutions for the purpose of exchange of staff

and students. This will enhance quality and experience.

3. Enter into linkage programme with industries and other reputable agencies to enable the teachers and students have hands on experiences using appropriate technologies.
4. Representatives of communities, faith based organizations, Non-governmental organizations, manufacturers, local and national chambers of commerce should be appointed into the Governing Boards, of the colleges of education. This will provide an opportunity for such representatives to appreciate the challenges facing the institutions and contribute to finding solutions to them.
5. Since a global worker must possess global skills and competencies, it is necessary that such intending workers be exposed to experiences that will enable them to think and act globally.

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