

Impact of New Technologies on Tertiary Business Education Curricula

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ABSTRACT

This paper examines the impact of new technologies on tertiary business education curricula. The paper addresses new technologies in business education; new technologies and business education curricula and evidential exposition of the impact of the new technologies on tertiary business education curricula. Business education is an integral component of Vocational Education in Nigeria's education system, at the tertiary education level. The reforms in the nation's education delivery have led to the tinkling of the curricular requiring the utilization of new technologies. The impact of new technologies on the curricular, therefore, occupies a major theme. Where the impact is positive, it indicates that the objective for integration is worthwhile; where it is negative, it shows that there is a serious problem demanding some actions. Education across the globe is now centred on new technologies hence; business education cannot ignore the importance of utilization of new technologies. Therefore, the concluded that a worthwhile curriculum of business education should provide learning experiences that will equip the graduate with requisite competencies in the use new technology and students should be trained to meet the market demands of the various occupations. It was recommended that business educators should provide their students with experiential base to develop the requisite competencies

Keywords: New Technology, Tertiary, Curriculum, Business Education

INTRODUCTION

Business education is a component of vocational technical education programme that prepare an individual for career in business and also to be an intelligent consumer of economic goods and services. Business education provides students with the needed competencies, skills, knowledge, understanding and attitudes to perform as workers in industries, civil service and also as proprietors of business. Business education is work-focused, skill-based, result-oriented and technology-based (Ugwoke, 2011).

Change is the only constant factor in life. This characterizes the dynamism in the competitive business environment. Education is seen as a document per excellence in preparing citizens for effective roles in the society. One form of education that equips its recipients to adapt to the changing world of work is business education. According to the American Vocational Association (AVA) in Osuala (2009), business education is a programme of instruction which consists of two parts: (a) Office Education; a vocational education programme for office careers through initial, refresher and upgrading education leading to employability and advancement in office occupation, and (b) General Business Education; a programme to provide students with information and competencies which are needed by all in managing personal and business affairs and in using the services of the business world. For Business Education programmes to remain relevant in providing the needs of individuals and that of

the society; they must embrace current trends (new technologies) in the academic and economic demands of the society.

Tertiary institutions, also known as higher education in Nigeria is that level of educational institution that provides education to individuals after post-primary or secondary education. Thus, tertiary business education course delivery is offered in Universities, Colleges of different disciplines, Polytechnics and monotechnics or special colleges (Koko, 2010). Some of these tertiary institutions run different curriculum in business education related courses. In the colleges of education is offered under the two options; accounting education and Office Technology and Management (OTM). In the polytechnic, business education is offered as Office Technology and Management (OTM). While in the universities, business education options offered however indicate the diversity of operation in different universities that offers business education. Thus, it can deduced that the design of business education curriculum in the universities is dependent on institutional goals and objectives as well as the background or affiliation of curriculum designers or depending on the nomenclature of the university involved (Koko, 2010). The options include; Accounting Education, Office Education (Secretarial Education), Management Education, Marketing/Distributive Education and computer Education. Therefore, business education programme do not only assume that business education should concentrate on the education of teachers of business courses, rather, there are elements of accountancy, business administration, marketing, finance, cooperative management and secretarial administration in business education (Okorie, 2001).

For tertiary institutions in Nigeria that offered business education programme to deliver on their mandates, the quality of the 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 world sense. If business education should serve this purpose of providing the needs of the learners and the society, there should be continuous review in its curriculum in order to ensure that the quality of education provided is in line with societal demands. This review of the curriculum will be to integrate new technologies that can help in passing the desired and required skills to the learner to make him/her employable and as well relevant in the ever-changing business environment.

Therefore, this paper is set to mainly discuss the impact of new technologies on tertiary business education curricula. Specifically, it discusses:

1. New technologies in business education;
2. New technologies and business education curricula and
3. Evidence of the impact of the new technologies on business education curricula.

NEW TECHNOLOGIES IN BUSINESS EDUCATION

Technology, according to Nwoji (2012), could be defined as the application of the scientific method to solving problems in our daily life. Put in the perspective of business education, however, technology is the application of scientific method to solving problems regarding impartation of skills to learners to meet the changing needs and demands of the society. In business education, there existed technology in a crude form but there has been a dramatic and significant change in the methods used by Business education to address the changing needs of the society.

According to Olson in Nwoji (2012), technology is a many-faceted phenomena in materials created and advanced by man to free himself from endearment by nature, but which, when undisciplined, enslaves its own creator. By this definition, technology helps to advance man's

course in his environment but moderation and control should be exercised to direct its use to solving problems of man, if not, may be misleading in itself.

The technological changes in business education are basically from Information and Communication Technology (ICT) perspective. The society generally is ICT-driven and in order to keep abreast of this change, there must be a restructuring in the knowledge and skills given to learners/students in business education. Electronic Office (e-office) is one of the phenomena of the 21st century which is a paperless office approach in which every office work is done with the use of computer. It is based on this that most Business Education departments in Nigeria's tertiary institutions are building ICT Centres, improved computer laboratories as well as offering professional courses in computer studies to produce students/graduates that can easily adapt in their ever-changing business environment. The use of typewriter is almost going into extinct as the computer is fast taking over.

New technologies in business education are designed to prepare students for a variety of careers in high-tech business offices. It is not easy to develop taxonomy of new technologies in business education because of their diversity and evolution in structures and functions. New technologies have been typologies differently by various authors. According to McLoughlin and Clark (1997), they may be classified into process and product technologies. According to Mazda's (1993), there are core and application technologies. To Haag, Cummings and McCubbrey (2002), new technologies are grouped into four categories, namely, new technologies for all the senses, new technologies for internet explosion, new technologies for the wireless revolution, and new technologies for personal use.

No doubt, the emergence of new technologies such as the computer, word processor, the internet, automated teller machines, reprographic machines, micrographic machines, accounting machines, modern telephonic systems including handset and multimedia, among others, have not only revolutionized the office environment but have also brought changes in the ways people are doing things. The computer is one of the most visible of the new technologies. Much as new technologies are indispensable in business education programme delivery, the concept of curriculum review is of utmost importance.

NEW TECHNOLOGIES AND BUSINESS EDUCATION CURRICULA

The term curriculum has been associated with academic study and training in higher education since its appearance in "vernacular" English in the sixteenth century. At several point in its history, the term not only defined an identifiable course or plan of study in an educational context, it also referred to the corollary body of scholars engaged in that course work. As such, curriculum refers to both an individual and collective learning experience (Alaba, 2012). The national demographic of education has shifted and the curriculum in tertiary institution has responded to and reflected changing political, socio-economic and cultural dynamics. Growing recognition has also fostered curriculum adaptation and evolution. All these development have changed expectations for tertiary education.

Curriculum, from its original Latin meaning, means "running a course" or a course which one runs to reach a goal (Ogwu and Oranu, 2006). This means that curriculum involves setting a particular programme that the learner has to pass through to attain a certain level of knowledge in any field of education. Curriculum must be seen as the reconstruction of knowledge and experience, systematic developed with the guidance of the school or relevant agencies which will enhance the learner's and the society's well-being (Moronkola, Akinsola and Abe, 2000). Atueyi and Okolo (2005) opined that curriculum is a structured series of intended learning experiences that embrace purpose experiences provided and directed by educational institutions to achieve predetermined objectives. Ogiagah (2009), also defines

curriculum as a group of planned experiences in proper sequence of topics designed to prepare individuals for efficient service in a specific vocation.

These definitions show that for a curriculum of any course to be meaningful, it must take into cognizance, the learners and the environment. Looking at curriculum contribution from the point of view of different people, we can say that curriculum is very important in tertiary institution programme, it changes as technology changes. This means that curriculum should not be rigid; it should be adaptive to changes.

There is a nexus between the employability skills and business education curriculum design and implementation as curriculum attempts to provide the best possible learning opportunities. The restructuring of the business education curriculum to adapt with these changes in the demand of the society is seen as the evidence of the impact of the new technologies. It is the curriculum that conveys the environment for effecting the effective realization of technology impartation and adaptation on the part of business educators. The curriculum, therefore, stands out as a strong factor for consideration in ensuring quality assurance and/or re-assurance in business education.

Curriculum as a planned programme of learning experience which seeks to develop the abilities of a learner under the supervision of the school has a laudable contribution in the new technologies in business education. According to Olaitan (2009), three aspects of the curriculum determine the achievement of objectives, namely; Input, Process and Output. These three stages highlight the role of human and material resources needed for implementation of the curriculum, methods and techniques used by the teachers and the learners, and the quality of change that has taken place in them from the interaction.

These three factors are continuously assessed in the system in order to establish integration of changes in technologies in the learning environment. According to Moreno (2006), educational reforms all over the world are increasingly curriculum-based as mounting pressures and demands for change tend to target and focus on both the structures and contents of the school curricula. As a result of the constant change in the society and in the world over, it becomes absolutely necessary that the content of the curriculum be adjusted to suit the inevitable changes. This change brought about the introduction of new technologies in education, business education is inclusive. Modern business education curriculum provides the introduction of ICT in the form of ICT-literacy, Application of ICT, Infusing of ICT skills and ICT specialization. These reforms have added good quality to business education curriculum content which is geared towards meeting the demands of the society.

Curriculum is so designed that the experiences the individuals acquire adequately prepare them to become responsible citizens capable of making contributions to the needs of the society, organisations and individuals. Curriculum should contain a statement of the policy, major objectives of the programme, list of courses, the length of time for each course and the relevance of the programme. The National Board for Technical Education (2004), for example, has highlighted the content of the curriculum to include practical and theoretical skill knowledge essential to fulfil the requirements of the specific job objectives, to equip the students with adequate communication and small business management skills, sound knowledge of political, social and economic environment, all-round knowledge not only to become skilled worker but also to become self-employed, if the trainee chooses to do so.

There is the need for a quality programme to adjust its curriculum to technological changes in business and industry and the requirements of labour. Osuala (2009) is of the opinion that technology is changing at a very fast rate in both developed and developing countries. Accordingly, there is the need for better preparation of educators, in business education for

the world of work. Okwuanaso (2004) asserted that the more the changes in Information and Communication Technology are occurring, the more new occupational opportunities emerge. He added that new occupational opportunities demand training and retraining that will enable the beneficiaries to meet the challenges of ever-changing skill requirements. The curriculum should cope with the rapid changes, hence the urgent need for the introduction of new technologies into the classroom. It is necessary that business education curricula are based on technological developments in industry/business such that will recipients new and current skills of modern equipment and machines of the various occupations.

EVIDENCE OF THE IMPACT OF THE NEW TECHNOLOGIES ON BUSINESS EDUCATION CURRICULA

Contemporary business education curricula have been impacted greatly by modern technological developments (new technologies). At the Delta State University, Abraka, as an illustration, such new technologically-based courses in Business Education Unit in the Department of Technical and Business Education, include:

- BED 202/212 Basic Word Processing/Format Typewriting I &II
- BUS 114 Business Communications
- CSC 200 Introductions to Computer
- GST 112 History and Philosophy of Science and Technology
- BUS 307/317 Data Processing and Management Information I & II
- BED 304/314 Intermediate Word Processing I & II
- BED 306 Office Information Systems
- BED 311 Business Machine
- BED 317 Secretarial Procedures
- BED 405/415 Advanced Word Processing I & II

Source: Faculty Hand Book, Business Education Course Outline, Department of Technical and Business Education, Delta State University, Abraka.

At Nnamdi Azikiwe University, Awka, the following courses are offered in business education in response to new technological developments:

- BED 144/245 Basic Word Processing I & II
- GSE 101 Computer Appreciations
- CSE 101/102 Computer Programming I & II
- BED 211/212 Office Information System I & II
- GSE 201 Computers Programming I
- BED 334 Business Machines
- BED 313/314 Office Information System III & IV
- ACC 371 Management Information System
- BED 345/346 Intermediate Word Processing I & II
- BED 415 Applied Word Processing

Source: Faculty Hand Book, Business Education Programme Course Outline, Department of Vocational and Adult Education, Nnamdi Azikiwe University, Awka.

In the polytechnics, a careful analysis at the National Diploma (ND)/ Higher National Diploma (HND) Office Technology and Management curriculum indicates that a number of

the new technology-based courses are introduced into the programme, both in the ND and HND levels. Also, quite a number of courses which are believed not to be compatible with the present technological changes were deleted from the adjusted/reviewed curriculum.

The new technology-based courses introduced in the ND are:

- OTM 113 Information and Communication Technology I
- OTM 123 Information and Communication Technology II
- OTM 124 Modern Office Technologies
- OTM 125 Career Developments
- OTM 221 People's Communication Skills
- OTM 222 Records Management
- OTM 213 Desktop Publishing
- OTM 223 Web Page Design

In the HND programme, the new technology-based courses include:

- OTM 313 ICT Office Applications I
- OTM 322 ICT Office Applications II
- OTM 325 Professional Career Developments
- OTM 413 Database Management Systems
- OTM 414 Oral Communication Skills
- OTM 415 Advanced Desktop Publishing
- OTM 424 Professional Ethics and Social Responsibility
- OTM 425 Advanced Web Page Design

Source: NBTE Curriculum and Course Specifications; for ND/HND Office Technology and Management (2004)

At the Nigeria Certificate in Education (NCE) level, business education curriculum did not take much care of the new technologies. However, the recent National Commission for Colleges of Education (NCCE) curriculum in business education has been impacted upon by new technologies with the introduction of such courses as:

- BED 228 Computer Appreciations
- OTM 317/327 Word Processing I & II
- BES/BEA 318 Computer Application/ Information Technology

Besides the above new technologically-based courses introduced, in several other existing courses in business education curriculum, the place of new technologies was identified with the inclusion of related topics such as in:

BED 125 Office Practice: Office equipment and machines, Electronic computer, Hand-processing machines, among others.

VTE/BED 220 Entrepreneurship in VTE I: Business and Technology; Issues and Problems.

OTM/BEA 314 Business Communication: The impact of information technology

OTM 315 Secretarial Duties: Telecommunication equipment; Telephone, Fax, e-mail, among others and Office equipment including reprographics.

Source: National Commission for Colleges of Education (NCCE) Curriculum in Business Education (2008)

CONCLUSION

A worthwhile curriculum of business education should provide learning experiences that will equip the graduate with requisite competencies in the use of modern office technology. This paper has revealed that the economy is changing and business education students should be trained to meet the market demands of the various occupations. A good number of courses have been introduced in business education as a reflection of new technological developments and these courses are run by the colleges of education, polytechnics and the universities that offer business education programme.

RECOMMENDATIONS

Having identified the impact of new technologies on tertiary business education curricula, the following recommendations are made:

1. It is imperative that educational institution authorities should provide requisite new technologies for effective instructional task management for business education.
2. Business educators should be challenged to provide their students with experiential-base for developing requisite skills, knowledge and attitudes to live and work in technologically dynamic society.
3. Business education curriculum should be flexible in order to meet with these new technological-base courses.
4. The society is not static; it changes over a time, as a result, curriculum should adapt to these changes as it affects business education.
5. Adequate structures and technologies should be provided to achieve the goal of the adjusted/reviewed on tertiary business education curricula.

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