



APPRAISAL OF NATIONAL DIPLOMA, OFFICE TECHNOLOGY AND MANAGEMENT CURRICULUM IN MEETING ENTREPRENEURIAL REQUIREMENTS FOR OPERATING A COMPUTER BUREAU

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Abstract

The study appraised the content of National Diploma, Office Technology and Management Programme in meeting the requirement of its graduates in engaging in entrepreneurship activities as it relates to operating a computer bureau. The purpose of the study was to find out the extent the embedded competencies in the curriculum are able to equip prospective graduates with the skills, knowledge and attitude required to run a computer bureau. One research question guided the study and one null hypothesis was tested at 0.05 level of significance. Descriptive survey design was adopted. The population comprised 14 OTM lecturers in Akanu Ibiam Federal Polytechnics, Unwana and 23 Computer bureau operators in Afikpo North Local Government Area. The entire population was studied because it was manageable. A four-point structured questionnaire with 13 items was used. The questionnaire was face and content validated by three Chief lecturers in the department of Office Technology and Management, Akanu Ibiam Federal Polytechnic, Unwana. The internal consistency reliability for the instrument was established using Cronbach's Alpha Reliability Coefficient which yielded a reliability coefficient of 0.89. The data were analysed using mean statistics and standard deviation for the research question and t-test for the hypothesis. The result showed that ND OTM curriculum was appraised to be very highly embedded with curriculum content that will enable its graduates operate a computer bureau enterprise. The lecturers and computer bureau entrepreneurs had no significant difference in their mean responses on the extent ND OTM curriculum is embedded with competencies that will enable its graduates operate a computer bureau. Thus, the null hypothesis was retained. The study recommended among others that Office Technology and Management lecturers should be deliberate in selling this business prospect to students; giving them the necessary support, ideas and encouragement while in school. Moreover, School management should liaise with enterprises/entrepreneurs that could be of help to students by inviting such firms for symposia, workshops and seminars. This suggests that the Continuing Professional Development Centres (CPDC) seminars being held for final year (ND II and HND II) Polytechnic students should be taken more seriously as this will help to expose them to the nitty-gritty of setting up an enterprise.

Key Words: *Office Technology and Management, Curriculum, Computer Bureau, Entrepreneurial Requirement.*

Introduction

"Innovation is the specific instrument of entrepreneurs, the means by which they exploit change as an opportunity for business" - Peter Drucker. Could this imply that the innovations in ND OTM curriculum are means by which the graduates of the programme should exploit for a business opportunity? If this is suggested, it therefore means that the ND OTM curriculum ought to contain ingredients that can launch its graduates into entrepreneurial activities that are worthwhile. Such activities should reflect the core of the competencies inherent in the programme, competencies that reflect management of information. Adequate acquisition of the competencies embedded in the curriculum should enable the ND OTM graduate to engage in entrepreneurial activities that are related to the field. Considering the course content of the programme, Akasi and Aliu (2018) posited that OTM programme is information systems management and information system profession that relates the functions of information system to organizational structure. This is because the curriculum lays emphasis on computer related courses such as webpage design, multimedia application, management information system, desktop publishing among others; unlike the 1989 curriculum that had only word processing as the only computer related course. The content is therefore expected to build and develop in its recipients' competencies to function effectively in modern office environment. These competencies according to Azih and Ama (2020) are managerial competencies,



communication competencies, human relations competencies, manipulative competencies, technical and information and communication technology competencies. These basic competencies embedded in the curriculum are expected to equip the ND OTM graduates with skills in running a 'Computer Bureau' or what we call 'Business Centre'.

A computer bureau is a service centre where 'information' is managed for individuals and corporate bodies. They use modern office machines and equipment to digitally create, collect, store, manipulate, and relay information for individuals and corporate bodies. They provide various services like data processing, desktop publishing, internet services, and reprographic services, (Ikelegbe 2016). According to www.investorwords.com, (Retrieved, July 16, 2023) it is an office which offers to do work on its computers for companies which do not own their own computers or trained hands. It could also be seen as a business office that out-sources services based on the use of computers and personnel to do some work for private individuals or companies for a fee (www.answers.com). Therefore, a computer bureau exists to provide data processing and online services, offer a variety of software packages, batch processing services as well as custom programming. They also support desktop publishing and presentations; provide image setting, colour proofing, slide creation and other related services.

Polytechnics in Nigeria as a tertiary institution has a core mission of creating, adopting and disseminating knowledge; in order to groom more and better educated individuals with better professional competencies, more enterprising skills and innovativeness (Azuka, 2016). It awards National Diploma certificates to its graduates who have undergone two years intensive training in various fields of endeavour. Office Technology and Management is one of such fields of endeavour that students are exposed to. This programme has the aim of producing office management workforce who can fit into office activities of the information age. It has strong formative influence on the attitudes and behaviours of its recipients. The goal of OTM curriculum is to provide training in business and office skills and to develop ability to use these skills in work environment. It prepares people for work in business occupations and information centres. OTM programme according to Sani in Nnaji (2019) involves the process of guiding and initiating the learners to acquire the necessary skills, facts, knowledge, habits and attitude that will make them co-exist with others as useful and productive members of the society.

Ojukwu (2009) opined that National Board for technical Education (NBTE) embarked on comprehensive review of all minimum guide curricula from 2001 which sought to radically transform the polytechnics programmes to meet new technological and socio-economic trends and demands of the world of work. This radical transformation according to him ensured that every programme contained Information and Communication Technology and Entrepreneurship modules with emphasis on practical work. Nwabuona (2010) added that this reform agenda birthed an OTM curriculum which is focused on combining office information technological skills with adequate and relevant knowledge in solving organizational problems. Umoru (2009) also agreed that the curriculum is designed to equip students with vocational skills in office technology and management, effective work competencies and socio-psychological skills. The 2004 and subsequent review in 2006, and 2009 of the curriculum were therefore, birthed out of the noticed gap in the course content and the demand in e-world of work.

According to NBTE (2009) for the goal of OTM to be achieved, a student must be exposed to the curriculum course content as shown below:

ND OTM Curriculum Structure

ND 1

1st SEMESTER

Technical English I
Citizenship Education
Introduction to Business I
Shorthand I (40 wam)
ICT I
Office Practice I
Keyboarding I
Business Etiquette
Principles of Law
Basic French

2nd Semester

ICT II
Citizenship Education II
Introduction to Entrepreneurship
Business Law
Career Development
Shorthand II
Modern Office Technology
Keyboarding II
Basic French
Communication in Business
Records Management
Technical English II



ND 11

1ST SEMESTER

Technical English III
Research Techniques/Use of Library
Shorthand III (60 wam)
Multimedia
Office Practice II
Desktop Publishing
Principles of Accounting
Keyboarding III
Office Equipment & Maintenance
Principles & Practice of Entrepreneurship
Use of French 1

2ND SEMESTER

Social Psychology
Principles of Economics I
Web Page Design
Communication Skills
Project
Management Information System
Practice Entrepreneurship
Meetings & Conferences
Keyboarding IV
SIWES
Use of French II
Human Resources & Management
Shorthand IV

Fig. 1: Office Technology and Management course specifications 2009

Ovbiagele and Amiaya (2008) posited that this development and significant improvement was kick-started by the 2004 edition of the Curriculum and Course Specification by NBTE. The expansion and inclusion of ICT and entrepreneurship development subjects marked a critical turning point in the history of education in Nigeria with reference to unemployment reduction and preparing graduates for self-reliance.

A thorough examination of the course content of ND OTM Curriculum, according to Okoro, Ezoem and Chiedu in Akasi and Aliu (2018) is expertly and professionally organized. In their opinion, proper organization of curriculum is in place when content and learning experiences are arranged in two forms to ensure the progressive relationship between them. These two forms are relationship over time, otherwise called vertical relationship and relationship from one area to another called horizontal relationship. The relationships that exist in the placement of the courses reveal vertical as well as horizontal relationship.

The course content of the programme confirms that the curriculum is a replica of the changes in the modern business office. The curriculum is well packed with information and communication technology skills needed to function effectively in a modern office. Entrepreneurship education which should expose students to skills in establishing and running enterprises in their field is also incorporated. A four-month supervised industrial work experience scheme which is one of the criteria for the award of National Diploma in OTM is also intended to furnish the student with a hand-on experience needed for real office work. In addition, the curriculum content is written in behavioural objectives, so that it is clear to all, the expected performance of any student who successfully completes the courses of the programme. In addition, the provision of the curriculum is in such a way that the teaching of the theory and practical work should, as much as possible, be integrated. Practical exercises, especially those in professional courses and laboratory work are not to be taught in isolation from the theory.

Furthermore, the three grand objectives of the curriculum lay conviction on the ability of the curriculum to equip its graduates with the competencies to run a computer bureau. These objectives are:

- Acquisition of office skills
- Acquisition of general education
- Laying foundation for advanced studies

The elaboration of the first grand objective suggests that if the blue print of the curriculum is well implemented, the programme will produce hybrid administrative professionals to respond to the demand of a dynamic and intensely computerized work place (Nwabuona 2012). Thus:

Graduates of the ND should fit into the office of any computerized organization and perform professionally, the functions of a secretary which among others include-relating the functions of the office to the whole organization, attending meetings and providing information, taking appropriate action independently when faced with challenging secretarial office problem, showing personal qualities and attributes that are conducive and co-exist with the work group. (NBTE, 2009 National Diploma in OTM Curriculum and Course Specifications. Page iii)

The OTM curriculum is outstandingly different from the 1989 Secretarial Studies curriculum which was in use in the programme till 2004 when NBTE saw the need for the curriculum restructure. The 1989



Secretarial Studies curriculum had word processing as the only course that points to the use of computer as a work tool of a modern office practitioner. Thus:

ND Secretarial Studies Curriculum Structure of 1989

ND I

1st Semester

Beginning Shorthand (60 wam)
Beginning Typewriting (25wam)
Principles of Accounts
Introduction to Business
Use of English 1
Citizenship Education

2nd Semester

Shorthand (80 wam)
Typewriting (35 wam)
Office Practice
Business Mathematics
Principles of Law
Communication in English 1

ND II

1st Semester

Shorthand (90 wam)
Typewriting (40 wam)
Secretarial Duties
Principles of Economics I
Use of English II
Government
Word Processing I

2nd Semester

Shorthand (100 wam)
Typewriting (50 wam)
Principles of Economics II
Communication in English II
Introduction to Psychology
Project
Word Processing II

Fig 2: Secretarial students' curriculum and course specifications 1989

This content according to Ikelegbe and Odede in Azih and Ama (2019) cannot in anyway prepare students for modern office practice as the curriculum does not lay emphasis on the skills that will enable its graduates fit into automated offices and perform professionally the roles of office managers. It rather emphasized mundane duties that have been taken over by automation.

The study therefore aims at appraising the ND OTM curriculum viza-vis the competencies that could enable its graduates engage in 'computer bureau' enterprise.

Statement of Problem

National Diploma Office Technology and Management is a vocational programme that is expected to equip students with skills, knowledge, attitude and abilities to handle office functions in the modern times. It is basically ICT driven. The inclusion of Entrepreneurship Development Education has further made it possible for National Diploma graduates of OTM to be able to gain improved interpersonal relationship, team-work, financial management and risk taking abilities which is an added advantage to using the ICT skills provided for in the OTM curriculum to run an enterprise in the form of 'computer Bureau'. However, one can easily observe that most of the graduates seek employed job with vigour as against the use of the skills they have been equipped with to be self-reliant and employer of labour thereby contributing to national development as advocate in entrepreneurship.

Paul-Mgbeafulike (2020) observed that entrepreneurship centres are targeted to provide necessary skill training to students of tertiary institution for gainful self-employment on graduation. Unfortunately, the above objective appears to be far from reality. The probable reason might be that entrepreneurship education and entrepreneurial centres in higher institutions of learning have laid much emphasis on 'artisan skills' to such an extent that it seems as if all that is involved in entrepreneurship must be something outside your discipline or course of study. Meanwhile these 'artisan skills' like tailoring, bakery, bid making and the like have been made so rampant and common as most illiterates engage in them. This emphasis seems to hamper the rate at which undergraduates explore their discipline for entrepreneurial endeavours, Office Technology and Management Programme inclusive. The study therefore is aimed at appraising the ND OTM curriculum viza viz its embedded ICT competencies that could enable its graduates in engaging in 'computer bureau' enterprise.

Research Question

To what extent could the competencies embedded in the course content, equip ND OTM graduates for operating a 'computer bureau' enterprise?



Hypothesis

This null hypothesis was tested at 0.05 level of significance:

Ho: There is no significant difference in the opinions of OTM lecturers and computer bureau entrepreneurs on the extent the competencies embedded in the course content could equip ND OTM graduates for operating a 'computer bureau' enterprise.

Method

A descriptive survey design was used because the study sought the opinions of respondents. This is in agreement with the opinion of Otache in Tony Okeme and Umoru (2021) that descriptive research design describes the elements or subjects being studied. The population comprised 14 OTM lecturers and 23 entrepreneurs of computer bureau enterprises in Afikpo North Local Government Area. A census was taken because the population was manageable therefore the entire population of 37 were used.

A 13-items questionnaire based on the competencies embedded in National Diploma, Office Technology and Management curriculum was developed by the researcher. The variables were structured along the Likert-scale format. Each response was given a corresponding normal value as follows: Very High Extent (VHE) - 4 points; High Extent (HE) - 3 points; Moderate Extent (ME) - 2 points; Low Extent (LE) - 1. Items considered as very highly contributing to equipping ND, OTM graduates for operating a computer bureau had a score between 3.01 and 4.00. Items scoring 2.01 and 3.00 were rated as contributing to high extent in training ND graduates to be able to operate a computer bureau, while items rated between 1.01 and 2.00 were rated as being able to moderately prepare OTM graduates for computer bureau enterprise and finally items rated 0.01 and 1.00 were for low extent of contribution. The instrument was validated by three Chief Lecturers drawn from Akanu Ibiam Federal Polytechnic, Unwana. The reliability of the instrument was established using Cronbach Alpha Reliability Coefficient and it yielded a reliability index of 0.89. The researcher personally administered the instruments to the 14 OTM lecturers in Akanu Ibiam Federal Polytechnic and 23 Computer operators in Afikpo North Local Government Area of Ebonyi State. A total of 37 copies of the instrument were administered, retrieved and used for the study. The mean and standard deviation were used to answer the research question while t-test was used to test the null hypothesis at 0.05 level of significance.

Results

Research question

To what extent could the competencies embedded in the course content, equip ND OTM graduates for operating a 'computer bureau' enterprise?

Table 1: Mean responses and standard deviation on the extent the competencies embedded in the course content can equip OTM ND graduates for operating a computer bureau enterprise. N=37

S/N	Variables	Mean (\bar{x})	SD	Decision
1.	Communication competencies in ND OTM curriculum train graduates to operate a computer bureau enterprise	3.34	0.77	VHE
2.	ICT competencies equip ND OTM graduates	3.54	0.80	VHE
3.	Financial management content prepare ND OTM graduates	2.76	0.68	HE
4.	Competencies for conducting feasibility studies equip ND OTM graduates	2.89	1.05	HE
5.	Competencies in inter-personal relationship prepare ND OTM graduates for computer bureau enterprise	3.22	0.82	VHE
6.	Risk management competencies train ND OTM graduates for operating computer bureau enterprise	2.78	0.85	HE
7.	Competencies for identification of business opportunities in OTM curriculum equip its graduates for computer bureau enterprise business	3.08	0.92	VHE
8.	Competencies in applying creative packaging	3.19	0.92	VHE
9.	Innovativeness competencies in ND OTM curriculum train graduates for computer bureau enterprise	2.92	0.80	HE
10.	Managerial competencies train ND OTM graduates for computer bureau enterprise business	3.41	0.80	VHE
11.	Time management competencies prepare ND OTM graduates for computer bureau enterprise	3.11	0.91	VHE
12.	Environmental management competencies equip ND, OTM graduates for computer bureau business operation	2.76	0.95	HE



13.	Competencies for coping with governmental policy changes equip ND OTM graduates to run a computer bureau enterprise.	2.78	1.11	HE
	Grand mean	3.07	0.88	VHE

Table 1 revealed that the mean appraisal of the items by lecturers and computer bureau operators ranged from 2.75 to 3.54 with grand mean of 3.07 and standard deviation of 0.88. Therefore the grand mean of 3.07 depicts that ND OTM curriculum was appraised as very highly embedded with curriculum content that will enable its graduates operate a computer bureau enterprise.

Hypothesis

There is no significant difference in the opinions of OTM lecturers and computer bureau entrepreneurs on the extent the competencies embedded in the course content could equip ND OTM graduates for operating a 'computer bureau' enterprise.

Table 3: Summary of t-test analysis of OTM lecturers and computer bureau entrepreneurs on the extent the competencies embedded in the course content could equip ND OTM graduates for operating a computer bureau enterprise.

Experience	N	Mean	SD	Df	t-cal	t-crit	Decision	Significance
Lecturers	14	3.10	0.20	24	0.19	1.71	Accept	Not Significant
Entrepreneurs	23	3.08	0.38					

From the table above, the calculated t-value of 0.186 is less than the t-critical value of 1.719, at 0.05 level of significance; therefore the null hypothesis is accepted. Thus, there is no significant difference in the mean responses of lecturers and computer bureau entrepreneurs on the extent ND OTM curriculum is embedded with competencies that will enable its graduates operate a computer bureau.

Discussion of Results

Based on the results from the analysis of data, it was found out that ND, OTM curriculum is very highly embedded with competencies that will enable its graduates operate a computer bureau. These competencies which are information and communication technology competencies, communication competencies, financial management competencies, interpersonal relationship competencies, risk management competencies, ability to identify business opportunities, application of creative packaging, innovativeness, time management, environmental management, and coping with governmental policies are all provided for in the curriculum. No wonder Esene (2010) asserted that the course content provisions in the curriculum are divided into (a) special areas which include secretarial studies, techniques in office management control; (b) Information and Communication Technology Application which includes ICT, Word Processing, Management Information System, Multimedia, Desktop Publishing, Computer Appreciation and Web Page Design etc; and (c) General Education relating to contemporary problem solving usually called general studies. According to him, the new OTM curriculum as opposed to the old one consists of five (5) main components of the course-programmes viz: - General Studies/Education - Foundation Courses - Professional Courses - Entrepreneurship Development - Supervised Industrial Work Experience Scheme (SIWES) which take care of the competencies required to operate a computer bureau. Leka and Summi (2020) also concur that OTM curriculum, by its nature, scope and contents; help the recipients of the course-programme to acquire relevant knowledge and skills for self-reliance. He remarked that communication skills as provided for in the programme course content enhance relationship and foster successful operation of business. It enables one to perform tasks effectively. In the same vein Ikelegbe (2016) asserted that for a computer bureau entrepreneur to function effectively he must require office and basic ICT skills and these are provided in the curriculum. This is also in consonance with the view of Mamabolo and Kerrim (2017) which states that technical skill which equips one with the creativity to design web pages and manipulate e-commerce platforms are embedded in OTM curriculum. Cooney (2012) pointed out that managerial skills are vital ingredients for a successful operation of a computer bureau enterprise and this is embedded in the course content of ND, OTM. Moreover, Hartman (2017) pointed out that human relation which is one of the important skills required by all prospective entrepreneurs is highly embedded in the curriculum.

The t-test result for hypothesis revealed that respondents did not differ significantly in their mean appraisal of National Diploma, Office Technology and Management curriculum in meeting entrepreneurial



requirements for operating a computer bureau. This agreement is in line with the assertion of Leka and Summi (2020) that on completion of their studies, OTM ND graduates are equipped with the necessary entrepreneurial competencies and knowledge to become entrepreneurs.

Conclusion

Based on the findings of the study, it is established that National Diploma, Office Technology and Management Curriculum is packed full with competencies that will enable the prospective graduates successfully establish, manage and operate a computer bureau. This is to say that the curriculum content if well implemented has the capacity to make the prospective graduates function appropriately and adequately in terms of turning perceived challenges into opportunities for self-reliance.

Recommendation

The following recommendations were advanced based on the findings of the study:

1. Office Technology and Management lecturers should be deliberate in selling this business prospect to students; giving them the necessary support, ideas and encouragement while in school.
2. School management should liaise with enterprises/entrepreneurs that could be of help to students by inviting such firms for symposia, workshops and seminars. This suggests that the Continuing Professional Development Centres (CPDC) seminars being held for ND II AND HND II students of the Polytechnic should be taken more seriously as this will help to expose them to the nitty gritty of setting up an enterprise.

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