

Assessment of the Adequacy of Instructional Resources in Business Education Programmes Relative to NCCE Standards for Colleges of Education in Nigeria

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Abstract

The study assessed the adequacy of instructional resources available for business education programmes at the colleges of education in Edo and Delta states of Nigeria in relation to the standards stipulated by the National Commission for Colleges of Education (NCCE). The study adopted the ex-post facto research design and was guided by five research questions. The population of the study comprised all the six business education departments of the colleges of education in Edo and Delta states of Nigeria. The entire population was studied in terms of adequacy of instructional resources. The data for the study was collected through direct observation using the NCCE benchmarks as inventory and analyzed using ratio and percentage scores. The study found that lecturers and physical facilities available for business education programmes are adequate in some of the colleges and not adequate in others. Equipment and supplies in the typing laboratories, shorthand studios and model offices were found to be grossly inadequate in all the colleges studied. Based on these findings therefore, it was concluded that students of business education in these colleges of education are learning without the necessary and required instructional resources for effective development. To this end, it was recommended among others that the National Commission for Colleges of Education should regularly supervise the programmes of business education and ensure that their stipulated standards are maintained.

Keywords: business education, equipment, facilities, lecturers, instructional resources, Nigeria

1. Introduction

1.1 Background to the Study

Education is universally recognized as an instrument for social, political, scientific and technological development. This is the reason why no society can afford to toy with the education of its citizens as this could result in a snail speed development. Education is generally seen as an aggregate of all the processes by which a child or young adult develops his/her abilities, attitudes and other forms of behaviour which are of value to the society in which he lives. It is a conscious training of the young to a life which would be useful to him and to the society to which he belongs. Ohiwerei (2005) considers education as the development of person's head, heart and hands for his self-fulfillment and optimum service to humanity. Hence, education has continued to be important and this is why there has been a growing concern in the last few years about the quality of education (including business education) that is offered in the nation's schools.

Business education is an aspect of this total education programme. Aliyu (2006) describes business education as the education for the acquisition and development of skills and competencies, attitudes and attributes which are necessary for efficiency of the economic system. It is the intellectual and vocational preparation of people for earning a living in the contemporary industrial and business environment. Business education encompasses education for office occupations, business teaching, business administration and economic understanding. One can as well agree that business education is the instruction given in tertiary institutions to prepare students for jobs in teaching, industries, administration and entrepreneurship. To this end, if general education is seen as a means of adjustment of the individual to his environment, then business education should simply be seen as a

means of adjustment of the individual to his business environment.

In Nigerian higher education system, business education is offered in the faculties of education of universities and colleges of education. Business education, either in the university or college of education affords its recipients teaching mastery in business subjects, necessary competencies in professional education, functional general education for life, skills to undertake research and additional learning experiences through in-service programmes (Ndinechi, 2001).

College of education is one of the post-secondary education institutions in Nigeria, designed specifically to train and prepare students for the teaching industry. However, colleges of education provide exposure and learning for prospective teachers at the level of the Nigerian Certificate of Education (NCE) in instructional methodology/pedagogy and theories of instruction and curriculum. Similarly, apart from the professional and general education courses, students of the colleges are also exposed to their chosen subject areas such as business education. Hence, the National Policy on Education (2004) stipulates that the minimum entry qualification into the teaching profession shall be the NCE.

Business education programme at the colleges of education is designed to achieve the following objectives according to the National Commission for Colleges of Education (2008:19);

- 1) 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.
- 2) To produce NCE business teachers who will be able to inculcate the vocational aspects of business education into the society.
- 3) To produce NCE business teachers who will be involved in the much desired revolution of vocational development right from primary and secondary schools.
- 4) To equip students with necessary competencies so as to qualify them for a post-NCE degree programme in business education.
- 5) To equip graduates with the right skills that will enable them to engage in a life of work in the office as well as for self-employment.

In order to implement and achieve these lofty objectives of business education at colleges of education, the National Commission for Colleges of Education (NCCE) which is the government regulatory and supervisory agency for the colleges of education in Nigeria stipulates the minimum standards of course offering and resource inputs that need to be available for the establishment and administration of business education programme at that level. The NCCE (2008) classified resources in business education into the following: Physical Facilities (this includes classrooms, staff offices, libraries, typing laboratories, model offices and shorthand studios), Equipment and Supplies (this includes the computers, photocopiers, tape-recorders, headphones, perforators, punching machines, stopwatch, stapling machine and others), Personnel (this includes the lecturers, instructors, technologists, and other support staff).

Instructional resources are important aspect of these resource inputs. Instructional resources according to Ugwuanyi and Eze (2008) are those basic requirements that aid and facilitate effective school teaching and learning. Instructional resources comprise human beings (teachers), facilities and equipment for teaching and learning. In business education, instructional resources include the business educators (teachers), typing laboratories, shorthand studios, model offices, facilities such as classroom, library, as well as equipment such as computers, typewriters among others. For the purpose of this study however, instructional resources are classified as follows; lecturers, physical facilities (such as classrooms, libraries, typing laboratories, shorthand studios, model offices, staff offices), equipment and supplies in the typing laboratories, equipment and supplies in the shorthand studios, equipment and supplies in the model offices.

Office Accommodation: The importance of office in an organization cannot be overemphasized. In the academic circle, the office is more than a home. It is described as a second home for teacher because much of the academic time is spent in the office engaging in one form of research, preparing for lecture, attending to students and the likes.

Books and Library: The most used of self-instructional facility has been the book. The book is still the most economical, most easily accessible and means of conveying information and ideas, considering the cost, size and operating problems of most instructional media. It is indeed the primary and basic source of information and idea in business education. Altbach in Owuoye and Yara (2011) opined that, nothing has ever replaced the printed words (book) as the key element in the educational process and as a result, textbooks are central to schooling at

all levels. In schools, book's collections are found in the library. The library is a repository and/or reservoir of books, tape, newspapers etc for people to read study or borrow. The chief purpose of library is to make available to students, teachers and researchers at easy convenience, all books, periodicals and other reproduced materials which are of interest and value to them. The importance of library has been demonstrated by the government in the National Policy on Education (FRN, 2004) when it states that every state needs to provide funds for the establishment of libraries in all her educational institutions.

Typing Laboratory and Shorthand Studio: Typing Laboratory and shorthand studio have been conceptualized as rooms or buildings specially built for teaching by demonstration of theoretical phenomenon into practical terms. Laboratory and studio are essential to the teaching of business education and the success of some of its courses is much dependent on the laboratory/studio and the provisions made for them. The teacher assumes a position of disperser of knowledge with the laboratory/studio serving the function of drill or verification and at the other extreme, the teacher assumes the position of guide to learning and laboratory/studio as a place where knowledge is discovered. Hence Yadar (2007) posited that some courses in science and vocational education cannot be considered as complete without including some practical work.

The Model Office: The model office is a working prototype of operations which reflects the real environment of a business office as closely as is practically possible. Business education model office is designed in such a way that it represents the actual operations happening in the real offices of a business situation. It is used to teach office clerical and secretarial practice. The model office is a simulation system which is used to enable business education students to experience working conditions and standards likely to be encountered in the real business offices after school. A business education model office usually has a receptionist, equipped with facilities and gadgets of a modern office. See appendix 1 for details of minimum instructional resources needed to administer and run a business education programme in the college of education as enshrined in NCCE (2008) document. Furthermore, in order to ensure that these minimum standards are maintained, the NCCE conducts a routine accreditation exercise of programmes run in the colleges of education. The major objective of accreditation programme according to National Board for Technical Education (2004) is to ensure that schools attain, sustain and ultimately exceed the minimum standards in curriculum, staffing, physical facilities and equipment. But Ukoh and Ahia (2004) observed that in colleges of education, a lot of fraud is being perpetrated by management in the effort to meet the accreditation agency's stipulations. In their view, equipment and facilities are often borrowed only to be returned once the accreditation is over leaving the programme not richer after the accreditation visit. This is the situation of many tertiary institutions in Nigeria.

However, instructional resources have been observed as a potent factor to qualitative and quantitative education. The importance to teaching and learning of the provision of instructional resources cannot be over-emphasized. Facilities and equipment constitute a strategic factor in organizational functioning and determine to a very large extent the smooth functioning of any social organization or system including education (Owoeye & Yara, 2011). Similarly, availability and adequacy of instructional resources promote effective teaching and learning activities in schools while their inadequacy and/or unavailability may affect the academic performance of the learner negatively.

The success of any system is a function of the available resources to run the system. Business education programme as a system can only be effectively implemented with adequate educational resources. Teaching facilities and equipment help to stimulate the interest of the students. Whenever these facilities and equipment are optimally utilized, they generate greater students' interest in the learning system and also enhance retention of ideas. The realization of the objectives of any educational programme depends on a number of factors such as the availability and adequacy of instructional resources. Availability and adequacy of relevant equipment, materials and tools in teaching facilitates learning, stimulate both teachers and students and enhances students' achievement.

A cursory look at the nation's colleges of education seems to show that the schools are struggling with limited resources and dilapidated/out-dated instructional facilities. Furthermore, it appears that Nigerians in the last few years are dissatisfied with the outputs of these schools of learning. The classrooms seem overcrowded with little or no relevant and adequate learning facilities. Even the school personnel appear to be in short supply. In view of this, Oyeniyi (2010) maintained that by inference, instructional resources have been positively linked with educational efficiency, students' academic performance and their capabilities when they leave school. This unwholesome situation of education in Nigeria has subsequently brought a growing concern about the quality and quantity of trained teachers and facilities in our schools. As the public intensifies its criticisms of the education system in Nigeria, experts in education and related field are also intensifying their search for the enhancement of quality education at all levels. Hence, the study assessed the adequacy of available instructional

resources for business education programmes at the colleges of education in Edo and Delta states of Nigeria in relation to NCCE standards. However, the assessment of the resources was based on the minimum standards stipulated by NCCE (2008) as its benchmark.

1.2 Statement of the Problem

More than anything else, instructional resources and facilities are very necessary for the utmost realization of the goals of education. In this era of accelerated technological development, modern instructional facilities and equipment are not only important, they are expected to be available in a reasonable state and properly utilized. Azih (2008) found that students offering business education in schools find it difficult to acquire the needed skills and competencies as a result of lack of adequate resources in the school. This situation in the teaching and learning of business education has been of great concern to educators and the decline in students' achievement may not be unconnected with the poor learning environment created by the state of limited instructional facilities. On the other hand, the number of students appears to have out-paced the available resources. To this end, the need to match the growing students' enrolment with a corresponding increase in the provision of relevant and modern learning resources cannot be under estimated. However, it is particularly worrisome to note that Nigerian tertiary institutions seem to be fast declining, especially in the area of resources required for the educational production processes. A careful look at the nation's schools may show that they are struggling with limited resources and non-functional facilities. This of course, may have a consequent effect on the products of these institutions. Hence, the need to assess the adequacy of instructional resources available for business education programmes at the colleges of education in Edo and Delta States of Nigeria in relation to NCCE standards.

1.3 Purpose of the Study

The study specifically assessed:

- 1) The adequacy of lecturers available for business education programmes at the colleges of education in Edo and Delta States in relation to NCCE Standards.
- 2) The adequacy of physical facilities available for business education programmes at the colleges of education in Edo and Delta States in relation to NCCE standards.
- 3) The adequacy of equipment and supplies available in the typing laboratories of business education programmes at the colleges of education in Edo and Delta States in relation to NCCE Standards.
- 4) The adequacy of equipment and supplies available in the shorthand studios of business education programmes at the colleges of education in Edo and Delta States in relation to NCCE Standards.
- 5) The adequacy of equipment and supplies available in the model offices of business education programmes at the colleges of education in Edo and Delta States in relation to NCCE standards.

1.4 Research Questions

The following research questions guided the study:

- 1) How adequate are the business education lecturers at the colleges of education in Edo and Delta States in relation to NCCE standards?
- 2) How adequate are the physical facilities available for teaching business education programmes of the colleges of education in Edo and Delta States in relation to NCCE standards?
- 3) How adequate are the equipment and supplies available in the typing laboratories of business education programmes of the colleges of education in Edo and Delta States in relation to NCCE standards?
- 4) How adequate are the equipment and supplies available in the shorthand studios of business education programmes of the colleges of education in Edo and Delta States in relation to NCCE standards?
- 5) How adequate are the equipment and supplies available in the model offices of business education programmes of the colleges of education in Edo and Delta States in relation to NCCE standards?

2. Method

2.1 Research Design

This study adopts the ex-post facto design. According to Akuezilo and Agu (2003), Ex-post facto design seeks to find out the factors or conditions associated with certain occurrence, outcomes, situation or process by analysis of past events or of already existing conditions. This type of design is adopted for this study because the resources to be assessed are already in place and existing. However, the researcher has no control of the variables and he cannot manipulate them because they already exist and cannot be changed and/or is unethical to do so.

2.2 Area of the Study

This study was carried out in Edo and Delta States of Nigeria. This two States were formerly one state known as Bendel state but were split in August 1991 into Edo and Delta States by the military administration of Ibrahim B. Babagida. Edo and Delta States are located in the South-South geo-political Zone of Nigeria. The two states are educational inclined and have many tertiary institutions.

2.3 Population of the Study

The population of this study comprises all the business education departments of colleges of education in Edo and Delta States. Akuezuilo and Agu (2003) maintained that population in research and statistics is used in a more specialized sense to include not just people, but also institutions, events, animals, objects, departments and things who or which have common characteristics. However, there are six colleges of education in Edo and Delta State, all running business education programme. They are; Federal College of Education (Technical) Asaba, Delta State, College of Education Agbor, Delta State, College of Education Warri, Delta State, College of Physical Education Mosogar, Delta State, College of Education Ekiadolor, Edo State, and College of Education Igueben, Edo State. Therefore, the entire population of this study is the six business education departments and they were studied in terms of adequacy of the available instructional resources. The entire population was studied since the size is manageable. So, there was no need of sample.

2.4 Instrument for Data Collection

The instrument for this study was the NCCE Benchmark inventory for instructional resources with regards to business education programmes. The NCCE Benchmark inventory is a standard checklist of resources required for business education programmes at the colleges of education in Nigeria. The checklist (instrument) is already validated and standardized by NCCE, hence, there was no validation of the instrument again. The checklist was completed through a direct observation conducted by the researchers in the six business education departments of the colleges of education.

2.5 Method of Data Analysis

In order to answer the research questions, the data collected was analysed using ratio analysis and percentage score. The benchmark for the analysis is the specifications by NCCE (2008) and the appropriate remarks are adequate and not adequate. Resources were regarded as adequate if the percentage available is 100 and above, while not adequate if the percentage available is less than 100.

3. Results

The results of this study are presented in the various tables according to the research questions.

3.1 Research Question One

How adequate are the lecturers available for business education programme of the colleges of education in Edo and Delta States in relation to NCCE minimum standards? To answer this research question, data regarding the research question were analyzed and the results are presented in table 1 below:

Table 1. Adequacy of lecturers for business education programme

College of Education	NCCE Benchmark	Students' Population	Expected Lecturer in relation to Benchmark	Number Available	Surplus/ Deficiency	% Available	Remark
Agbor	1:30	700	23	20	3*	87%	NA
Asaba	1:30	950	32	36	4	113%	A
Ekiadolor	1:30	1000	33	14	19*	42%	NA
Igueben	1:30	250	9	5	4*	55%	NA
Mosogar	1:30	195	9	11	3	122%	A
Warri	1:30	380	13	15	2	115%	A

NA=Not Adequate, A=Adequate, *=Deficiency

The results presented in table 1 show that the lecturers available for Business Education Programme in the colleges of education, Agbor, Ekiadolor and Igueben are not adequate in relation to NCCE minimum benchmark. The percentages of lecturers available in relation to the minimum benchmark are 87% for Agbor, 42% for Ekiadolor and 55% for Igueben. These percentages are less than 100; hence the number of lecturers for business education in the three colleges of education is not adequate. On the other hand, the result in table two also shows that the number of lecturers available for business education programme in the colleges of education, Asaba, Mosogar and Warri is adequate as obtained percentages show 113% for Asaba, 122% for Mosogar and 115% for Warri.

3.2 Research Question Two

How adequate are the physical facilities available for business education programme of the college of education in Edo and Delta States in relation to NCCE minimum standards? Data regarding research question two were analyzed and the results are presented in table 2 below.

Table 2. Adequacy of physical facilities for business education programme

S/N Physical Facilities	COE Agbor	COE Asaba	COE Ekiadolor	COE Igueben	COE Mosogar	COE Warri	Remark
1. Classroom (Chairs/desk)							
Benchmark (seat)	30:30	30:30	30:30	30:30	30:30	30:30	
Number Available	4(800)	(1450)	4(1200)	2(300)	3(600)	4(800)	
% Available	114%	153%	120%	120%	307%	211%	Adequate
2. Typing Lab							
Benchmark	1	1	1	1	1	1	
Number Available	2	2	1	1	1	2	
% Available	200%	200%	100%	100%	100%	200%	Adequate
3. Shorthand Studio							
Benchmark	1	1	1	1	1	1	
Number Available	1	1	1	1	1	1	
% Available	100%	100%	100%	100%	100%	100%	Adequate
4. Model Office							
Benchmark	1	1	1	1	1	1	
Number Available	1	1	1	1	1	1	
% Available	100%	100%	100%	100%	100%	100%	Adequate
5. Bus. Edu. Library							
Benchmark (Books)	1:10	1:10	1:10	1:10	1:10	1:10	
Number Available	273	530	0	0	0	410	
% Available	4%	6%	0%	0%	0%	11%	Not adequate
6. Lecturer's Office							
Benchmark	1:1	1:1	1:1	1:1	1:1	1:1	
Number Available	12	13	11	3	6	12	
% Available	60%	36%	75%	60%	55%	80%	Not adequate
7. ICT Lab.							
Benchmark	1	1	1	1	1	1	
Number Available	0	0	0	0	0	0	
% Available	0%	0%	0%	0%	0%	0%	Not adequate

S/N 5:1:10 = student to ten books, S/N 6: 1:1 = one Lecturer to one office

The result in table 2 shows that the available classroom capacities for business education departments of all the Colleges of Education studied are adequate. All the schools scored above 100% for available seating capacity. The benchmark for classroom seat is typically thirty chairs/desk for thirty students. Also, the table reveals that business education departments of the colleges of education Agbor, Asaba and Warri have two typing laboratories each and others one each while all the departments have one each of shorthand studio and model office. This is considered adequate as stipulated by NCCE standards, but ICT Laboratory is not available in all departments.

Also, the books in the business education library are not adequate for the students as stipulated by the benchmark of NCCE. This is seen in the percentages scored by each department as all scored below 100%. Meanwhile, colleges of education Ekiadolor, Igueben and Mosogar do not have business education library. Similarly, the lecturers' offices available are not adequate as required. This is also reflected in the percentages scored (below 100%) by all the departments.

3.3 Research Question Three

How adequate are the equipment and supplies in the typing laboratories of business education programme of the colleges of education in Edo and Delta States in relation to NCCE minimum standards? In order to answer this research question, data relating to the research question were analyzed and the results are presented in table 3 below

Table 3. Adequacy of equipment and supplies in the typing laboratories

S/N Equipment/ Supplies	COE Agbor	COE Asaba	COE Ekiadolor	COE Igueben	COE Mosogar	COE Warri	Remark
1. Typewriters							
Benchmark	30:30	30:30	30:30	30:30	30:30	30:30	
Number Available	175	122	78	34	62	138	
% Available	25%	13%	8%	14%	31%	36%	Not Adequate
2. Computer/Laptops							
Benchmark	1:3	1:3	1:3	1:3	1:3	1:3	
Number Available	35	26	0	10	23	57	
% Available	15%	8%	0%	12%	35%	45%	Not Adequate
3. Typing chairs							
Benchmark	30:30	30:30	30:30	30:30	30:30	30:30	
Number Available	210	148	74	44	85	191	
% Available	30%	16%	7%	18%	44%	50%	Not Adequate
4. Typing desks							
Benchmark	30:30	30:30	30:30	30:30	30:30	30:30	
Number Available	210	148	78	44	85	195	
% Available	30%	16%	8%	18%	44%	51%	Not Adequate
5. Instructor's Table							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number Available	4	3	0	2	1	3	
% Available	17%	9%	0%	25%	14%	23%	Not Adequate
6. Instructor's chairs							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number Available	4	3	0	2	1	3	
% Available	17%	9%	0%	25%	14%	23%	Not Adequate
7. Stapling machines							
Benchmark	4:30	4:30	4:30	4:30	4:30	4:30	
Number Available	6	5	2	4	5	3	
% Available	6%	4%	2%	12%	19%	6%	Not Adequate

8. Stapling removers							
Benchmark	4:30	4:30	4:30	4:30	4:30	4:30	
Number Available	2	0	0	1	1	3	
% Available	2%	0%	0%	3%	4%	6%	Not Adequate
9. Perforator							
Benchmark	2:30	2:30	2:30	2:30	2:30	2:30	
Number Available	0	4	2	2	5	4	
% Available	0%	6%	3%	12%	38%	16%	Not Adequate
10. Stopwatch							
Benchmark	2:30	2:30	2:30	2:30	2:30	2:30	
Number Available	3	0	1	1	1	2	Not Adequate
% Available	6%	0%	1%	6%	8%	8%	Not Adequate
11. Wall Clock							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number Available	2	2	2	1	1	2	
% Available	9%	6%	6%	13%	14%	15%	Not Adequate
12. Demonstration stand							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number Available	2	2	0	1	1	2	
% Available	9%	6%	0%	13%	14%	15%	Not Adequate
13. English dictionary							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number Available	2	1	0	1	1	0	
% Available	9%	3%	0%	13%	14%	0%	Not Adequate
14. Filing Cabinet							
Benchmark	2:30	2:30	2:30	2:30	2:30	2:30	
Number Available	3	4	3	2	2	2	
% Available	6%	6%	4%	12%	15%	8%	Not Adequate

The results in table 3 above show that all the items (equipment and supplies in the typing laboratories) in business education departments of colleges of education in Edo and Delta States are not adequate in relation to the NCCE minimum standards. This is reflected in the percentages scored by all the items (below 100%) across the departments studied.

In item 2 of the table, the finding reveals that business education programme of the College of Education, Ekiadolor has no computer/laptop in its typing laboratory. Similarly, the result of items 5 and 6 shows also that there is no instructor's table and chair in the typing laboratory of business education programme of the College of Education, Ekiadolor. Also, in item 8, result indicates that there are no stapling removers in the typing laboratories of business education department of colleges of education, Asaba and Ekiadolor. Again, the result in item 9 shows that business education programme of the colleges of education, Agbor has no perforator in its typing laboratory while item 10 reveals that business education typing laboratory of the college of education, Asaba has no stopwatch. In the same vein, the results of items 12 and 13 indicate that business education programme of the College of Education; Ekiadolor has no demonstration stand and English dictionary in its typing laboratory while college of education, Warri has no English dictionary as well. Generally, the equipment and supplies in the typing laboratories of all the business education departments studied are interpreted to be inadequate.

3.4 Research Question Four

How adequate are the equipment and supplies in the shorthand studios of business education programmes of the colleges of education in Edo and Delta States in relation to NCCE minimum standards? To answer this research question, data relating to it were analyzed and the results are presented in table 4 below:

Table 4. Adequacy of equipment and supplies in the shorthand studios

S/N Equipment/Supplies	COE Agbor	COE Asaba	COE Ekiadolor	COE Igueben	COE Mosogar	COE Warri	Remark
1. Tape recorder							
Benchmark	2:30	2:30	2:30	2:30	2:30	2:30	
Number available	3	0	0	2	2	0	
% available	6%	0%	0%	12%	15%	0%	Not Adequate
2. Headphones							
Benchmark	30:30	30:30	30:30	30:30	30:30	30:30	
Number available	16	0	11	0	15	32	
% available	2%	0%	1%	0%	8%	9%	Not Adequate
3. AC systems							
Benchmark	1	1	1	1	1	1	
Number available	0	0	0	0	0	0	
% available	0%	0%	0%	0%	0%	0%	Not Adequate
4. Lecturer's demo stand							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	1	1	1	1	1	1	
% available	4%	3%	3%	13%	14%	10%	Not Adequate
5. Punching machine							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	0	5	4	2	4	2	
% available	0%	16%	12%	25%	62%	15%	Not Adequate
6. File cabinets							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	1	0	0	0	2	0	
% available	4%	0%	0%	0%	31%	0%	Not Adequate

The results in table 4 above reveal that the equipment and supplies in the shorthand studios of the business education departments of the college of education in Edo and Delta States are not adequate in relation to NCCE minimum standards, as all the items scored below 100%.

The result in item 1 shows that the shorthand studios of the business education programmes of the college of education, Asaba, Ekiadolor and Warri have no tape recorders. While the result in item 2 shows that colleges of education, Asaba and Igueben have no headphone. Similarly, all the shorthand studios of business education studied have no air-conditioning system as shown by the result in item 3. Item 5 results reveal that there is no punching machine in the shorthand studio of business education programme of the college of education, Agbor while item 6 results indicates that the shorthand studios of colleges of education, Asaba, Ekiadolor, Igueben and Warri have no file cabinets in the shorthand. In all, the equipment and supplies in the shorthand studios are not adequate as all the items scored less than 100 percent.

3.5 Research Question Five

How adequate are the equipment and supplies in the model offices of business education programmes of the colleges of education in Edo and Delta States in relation to NCCE minimum standards? To answer this research question, data relating to it were analyzed and the results are presented in table 5 below:

Table 5. Adequacy of equipment and supplies in the model offices

S/N Equipment/Supplies	COE Agbor	COE Asaba	COE Ekiadolor	COE Igueben	COE Mosogar	COE Warri	Remark
1. Executive table/chair							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	1	1	0	0	0	1	
% available	4%	3%	0%	0%	0%	8%	Not Adequate
2. Secretary table/chair							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	1	1	1	1	1	1	
% available	4%	3%	3%	13%	14%	8%	Not Adequate
3. Photocopier							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	0	0	0	1	1	1	
% available	0%	0%	0%	13%	14%	8%	Not Adequate
4. Typewriter & Computer							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	5	3	2	2	3	4	
% available	20%	9%	6%	25%	42%	31%	Not Adequate
5. File cabinet							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	3	5	4	2	2	2	
% available	13%	16%	12%	25%	28%	15%	Not Adequate
6. Adding & lifting machine							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	0	0	0	0	0	1	
% available	0%	0%	0%	0%	0%	8%	Not Adequate
7. Wastepaper Bin							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	1	1	1	1	1	1	
% available	4%	3%	3%	13%	14%	8%	Not Adequate
8. Printer							
Benchmark	1:30	1:30	1:30	1:30	1:30	1:30	
Number available	1	1	0	0	1	1	
% available	4%	3%	0%	0%	14%	8%	Not Adequate

The result in table 5 above reveals that the equipment and supplies in the model offices of business education programmes of colleges of education in Edo and Delta States are not adequate with regard to NCCE minimum standards. All the items (equipment and supplies) in the table scored below 100 percent.

4. Discussion

The result of the analysis of research question one indicates that lecturers available for business education programmes at the colleges of education Agbor, Ekiadolor and Igueben are not adequate while that of colleges of education, Asaba, Mosogar and Warri are adequate. This finding is partly in consonance with the earlier study of Amaewhule (2004) who submitted that there are inadequate teachers and other technical staff in business

education programmes of Nigerian tertiary institutions. Similarly, Okwuanaso (2004) in another study noted that there is dearth of business education teachers in our schools. Okwuanaso maintained that this constraint of teachers in business education applies not only to secondary schools but also to the polytechnics, colleges of education and of course, the universities. The importance of adequate teaching staff in any educational programme cannot be overemphasized. They are cardinal and indispensable to the achievement of educational goals. Hence, Arubayi (2003) posited that quality education is impossible without teachers. Business education programme needs adequate teachers to enable it maintain standard and ensure quality in its delivery. However, the need for adequate lecturers is gradually being recognized and realized by some institutions as seen in the later part of this finding. Therefore, efforts should be made by all the colleges of education to meet and surpass the minimum requirement for lecturers.

In research question two, the result of the analysis reveals that physical facilities (classrooms, typing laboratories, shorthand studios and model offices) for business education programmes of colleges of education in Edo and Delta States are adequate while others (such as business education libraries/books and lecturer's offices) are not adequate and ICT laboratories are not available. By implication, this finding shows that physical facilities such as the classrooms (chairs/desk), typing laboratories, shorthand studios and model offices are available as required in all the colleges of education studied but that ICT laboratories are apparently not available in all the schools. This could be as a result of slow adaptation to ICT by tertiary institution in Nigeria as noted by Okolocha (2010), that compliance to e-learning and ICT in tertiary institutions with regard to preparing business teachers is inhibited by several factors domesticated in the Nigerian system.

On the other hand, the finding of research question two also reveals that libraries and its collections are inadequate. This finding agrees with the submission of Oyeniyi (2010) who posited that university libraries in Nigeria are nothing but a collection of antiquated and out-dated books and materials. Oyeniyi noted that the libraries are short of current books and periodicals. This can affect negatively the teaching and learning of business education. The library has been the most used of all self-instructional facilities. The library is a repository of books and its main purpose is to make available to students, teachers and researchers at easy convenience all books, periodicals and other reproduced materials which are of interest and value to them. Hence, Owoye and Yara (2011) maintained that the library (book) is still the most economical, most easily accessible and means of conveying information and ideas, considering the cost, size and other operating problems of most instructional media. Therefore, the library and its collections are needful in a reasonable state and date for success of business education programmes. This finding also reveals that lecturers' offices are not adequate. This is in line with the assertion of Esene (2002) that business education as a department in Nigerian schools is struggling with many challenges such as limited office accommodation for staff. The importance of offices especially in the academic circle cannot be overemphasized. Hence, it was described by Owoye and Yara (2011) as a second home for teachers because much of the academic time is spent in the office engaging in one form of research, preparing for lecture, attending to students and the likes. So, office accommodation should be provided for lecturers as required by NCCE.

The analysis of research question three indicates that the equipment and supplies in the typing laboratories of business education department at the colleges of education in Edo and Delta States are not adequate. This finding conforms to the previous study of Okoro and Iyeke (2004) who found that the typing pools of secondary schools only exist in vacuum and most at times with non-functional typewriters and computers. Similarly, Ntikudem (2005) observed that the supply of typewriters and computers to business education departments is limited considering the increase in students' enrolment. The computers, typewriters and other equipment in the laboratories of business education are far below standard. This is not good for a skill subject/course like business education. Hence, Okwuanaso (2004) noted that a business teacher cannot effectively teach a student the home-key of a typewriter or how to operate the adding machine without having the machines in the classroom. The qualification and background of a teacher can only be completed when the right and adequate instructional facilities and equipment are provided for effective teaching and learning.

As regards research question four, the result of the analysis shows that the equipment and supplies in the shorthand studios of business education departments in the colleges of education in Edo and Delta States are not adequate. The equipment and supplies in the shorthand studios are grossly inadequate and in some cases not available. This could have a bearing with the assertion of Ndinechi (2001) who posited that shorthand is one of the trees in the forest of titles under business education rubric, it has grown steadily over many years and now is dying a slow aimless death caused by rotting pockets of irrelevance. However, this position is disturbing since shorthand is still in the curriculum of business education at the NCE level and especially in the secondary school level. Most of the shorthand studios visited are deserted and covered by dust. Colleges of education should be

guided by NCCE specifications since it is the regulatory agency.

With reference to research question five, the result of the analysis indicates that the equipment and supplies in the model offices of business education departments at the colleges of education in Edo and Delta States are not adequate. The model office which is supposed to be a replica of real office situation is devoid of some of the modern office equipment and facilities. This finding is in conformity with the lamentation of Filani (2006) who remarked that it is very disturbing to note that teaching of business education programmes in schools is very much retarded in terms of technological and modern equipment. Model offices in our schools are only a caricature of the real business offices. Model offices in business education should be well equipped and regularly reviewed to reflect the ever-changing office technology and equipment.

5. Conclusion

Instructional resources (both human and material) are necessary ingredients for the attainment of business education objectives but this study has found that these resources are inadequate in the colleges of education in Edo and Delta States of Nigeria. On the basis of these findings therefore, it could be concluded that students of business education in these colleges of education are learning without the necessary and required resources and facilities for teaching and learning, and this may have affected the preparation and performance of the students over the years. And of course, these colleges are operating below the NCCE regulated standards. Therefore, efforts should be made by relevant authorities to provide adequate lecturers and other facilities and equipment to ensure quality of business education programme and its products and also adherence to NCCE minimum stipulations.

6. Recommendations

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

- 1) Adequate lecturers should be made available for business education by proprietors of colleges of education in relation to NCCE standards. When the number of lecturers is commensurate with students' size, it will enhance their effectiveness and guarantee their efficiency.
- 2) Adequate physical facilities should be provided for business education by the authorities of college of education as stipulated by the NCCE standards.
- 3) Typing laboratories, shorthand studios and model offices of business education should be adequately equipped with relevant facilities as required by the NCCE standards.
- 4) Departments offering business education programmes should look beyond funds from the proprietors and authorities of colleges of education through sponsorship and partnership with industries, non-governmental organizations, philanthropists and international donors for assistance in terms facilities and equipment.
- 5) Business education departments should regularly appraise and review the statuses of their instructional resources vis-a-vis the students' size to enable them adjust where needed.
- 6) The National Commission for Colleges of Education (NCCE) should regularly supervise the programmes of business education to ensure that its stipulated standards are maintained.

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Appendix

NCCE Benchmarks of Resources for Business Education

Facilities

- a. **Classrooms:** Space that would take thirty (30) students conveniently with sufficient room for passage within the classroom space should be made available for each lecture and seminar for each subject.
- b. **Laboratories/Studios:** At least, one (1) each of typing pool, shorthand laboratory, model office and information technology laboratory.
- c. **Staff Offices:** Each senior staff should be provided with a furnished office. The HOD should be provided with a computer facility.
- d. **Books in the Library:** There must be enough books to cover all the areas of the subject to the ratio of one student to ten books. A departmental library is compulsory.

Equipment and Supplies (for 30 students)

i. Typing Laboratory:

1. Typewriters
 - a. Manuals.....30 of various makes and types
 - b. Computer.....number should be in the ratio of one (1) computer to three (3) students.

2.	Swivel typing chairs	-	-	-	-	-	30
3.	Drop desk/typist/convertible desk	-	-	-	-	-	30
4.	Instructor's table or desks	-	-	-	-	-	1
5.	Instructor's chair	-	-	-	-	-	1
6.	Stapling machine	-	-	-	-	-	4
7.	Stapling remover	-	-	-	-	-	4
8.	Perforator	-	-	-	-	-	2
9.	Stopwatch	-	-	-	-	-	2
10.	Wall clock	-	-	-	-	-	1
11.	Demonstration stand	-	-	-	-	-	1
12.	English/Shorthand Dictionary	-	-	-	-	-	1
13.	Filing Cabinet	-	-	-	-	-	2

ii. Shorthand Studio

1.	Tape Recorders/Consoles	-	-	-	-	-	2
2.	Headphones	-	-	-	-	-	30
3.	Air-conditioning systems	-	-	-	-	-	1
4.	Lecturers' demonstration stand	-	-	-	-	-	1
5.	Punching machine-	-	-	-	-	-	1
6.	File cabinet	-	-	-	-	-	1
7.	Appropriate furniture as technology may detect from time to time						

iii. Model Office

1.	Executive table with drawers and chairs	-	-	-	-	-	1
2.	Secretary's table with drawers and swivel chair	-	-	-	-	-	1
3.	Photocopier	-	-	-	-	-	1
4.	File trays-in and out	-	-	-	-	-	1
5.	Manual typewriter and a computer	-	-	-	-	-	1
6.	File cabinet	-	-	-	-	-	1
7.	Adding and Listing Machine-	-	-	-	-	-	1
8.	Wastepaper basket-	-	-	-	-	-	1
9.	Any other latest office equipment in the market						

iv. There should be an information and communication technology (ICT) laboratory.

Personnel

1. Academic

At least one (1) academic staff per subject area with a minimum qualification of a first degree (minimum of a second class lower division). A minimum of nine (9) lecturers (one of whom should be a computer specialist) is required. All lecturers must be computer literate. Thus, computer literacy must be one of the criteria for fresh appointments. The staff/student ratio should be 1:30.

Source: National Commission for Colleges of Education (2008). Minimum standards for NCE Vocational and technical education (4th ed.), Abuja.