

Availability and Adequacy of Material Resources for Teaching Computer Appreciation in Business Education Department of Colleges of Education in the South-South Geo-Political Zone of Nigeria

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Abstract: This work assessed the material resources available for teaching Computer Appreciation in Business Education Departments in Colleges of Education in South-South geopolitical zone of Nigeria. Two purposes and research questions guided the study. The study employed survey research design. The population of the study consisted of seventy-five respondents made up of ten (10) Heads of Business Education Department and sixty five (65) computer appreciation lecturers in the Colleges of Education in South-South Geopolitical zone of Nigeria. The entire population was studied since it was manageable. A structured questionnaire was designed to elicit information from the respondents. Data obtained for the study were analyzed using percentages, mean and standard deviation to answer the research questions. The results showed that material resources were fairly adequate for the teaching of computer appreciation in the colleges of education in South-South Geopolitical zone of Nigeria. It was concluded that the government and college of education administration should provide adequate material resources for the teaching and learning of computer appreciation in colleges of education. It was recommended that the Heads of Department of Business Education should liaise with their college managements to ensure that adequate materials are provided for the teaching of computer appreciation in colleges of education in Nigeria.

Key words: Availability • Adequacy • Material • Assessment • Computer Appreciation

INTRODUCTION

Background to the Study: Computer appreciation is a programme of instruction that introduces the learners to the basic skills in computer operation. A computer is a device developed for storage and processing of data/information on a large scale in a domestic or industrial environment [1]. The usage of computer is indispensable in domestic, commercial or business life hence the need to ensure that graduates of business education are equipped with requisite knowledge, skills and abilities so that they can operate effectively in this digital era. Discussing the relevance of computer to our daily activities Wharton in the dictionary of computer science and internet described it as a programmable machine that can execute a programmed list of instructions. [2], also defined a computer as an electronic machine for information processing.

Computer technology has become an indispensable ally and tool for everyday activities of many civilized countries. Computers are used in all sectors of the economy of developing countries hence the introduction of teaching of computer appreciation into all levels of the educational system of various nations. In Nigeria, computer appreciation/literacy is being taught in Business Education department in Colleges of Education and Universities to prepare the prospective teachers in the use of the new technology. They are also expected to acquire the skills to teach computer literacy in primary and secondary schools by the end of their Nigeria Certificate in Education (NCE) programme in Business Education.

Aina [3] defined business education as a programme of studies which aims at creating awareness in business occupations, preparing youths for work in business occupation; preparing people to become better citizens and consumers of goods and services; and preparing

business teachers for task ahead. The graduates of the programme are called business educators and it is expected that they are adequately equipped with the requisite computer skills for effective teaching and usage of the skills.

Effective training of teaching personnel depends on the availability and adequacy of the facilities or material resources needed for their training. Computer literacy is a study of the skills necessary to operate a computer and the principles of the working of the hardware and software as well as the major computer applications and their social implications [4]. The objectives of computer literacy in teacher education include inter alia, to make teachers familiar with computer terms, able to enter and retrieve data, program a computer and know the uses of the computer [5]. According to [5] business educators have major roles in preparing the future teachers to become competent users of the microcomputer. It is on this premise, that computer appreciation was introduced into Business Education to enable students be skilled on the rudiments of computer in businesses. Material resources must be adequately provided to enhance teaching and learning of computer appreciation. Such materials include computers, printers, uninterrupted power, keyboard and mouse, software etc.

The selection of learning materials is a critical factor in the teaching-learning process. According to [6], a good material resource should be relevant to the topic, usable, accurate and economical. Good material resources, instructional aids or materials facilitate learning as they enable the learner to make use of various senses in the learning process. Sufficient provision of instructional materials and other material resources required for effective teaching of computer appreciation must be achieved for effective teaching and learning, hence the need to access the availability and adequacy of material resources for teaching computer appreciation in Colleges of Education as stated in the minimum standard required by the National Commission for Colleges of Education (NCCE). This is pertinent because graduates of business education need to be computer literate for them to perform optimally in their work places after graduation, hence appropriate provision of material resources should be made to ensure programme relevance.

Statement of the Problem: Provision of adequate instructional materials is a prerequisite to ensure adequate operation of a programme. Computer appreciation to be taught well needs adequate provision of instructional materials for effective delivery. According to Law (2003),

to educate students effectively in computer studies, computer hardware, suitably designed software and well prepared teachers are needed. Effective teaching and learning of computer appreciation in colleges of education in Nigeria is largely dependent on the availability of adequate number of material resources. These resources include textbooks, coding sheets, punched cards, computer hardware and software and programmed instructions.

A visit to some of the tertiary institutions offering computer appreciation, one discovers that they do not have enough materials for teaching and learning. This affects the quality of training received by the trainees since they do not have the instructional facilities requisite for effective teaching and learning of the course. This is obtainable in some colleges of education in Nigeria offering business education but the status of the ones in the South South geo political zone with respect to the provision of material resources are yet to be determined hence the problem of the study.

Purpose of the Study: The major purpose of the study was to identify the material resources available for teaching computer appreciation in selected colleges of education in South-South geo political zone. Specifically, the study sought to:

- Identify the material resources available for teaching computer appreciation in colleges of education in South-South Geo-political Zone in Nigeria.
- Ascertain the adequacy of material resources available for teaching computer appreciation in the colleges of education in South-South Geo-political Zone in Nigeria.

Research Questions: The study answered the following research questions.

- What are the materials resources available for teaching computer appreciation in the colleges of education in South-South Geo-political Zone in Nigeria?
- How adequate are the material resources identified in the colleges of education in South -South Geo-political Zone in Nigeria?

Methods: This study examined the adequacy of material resources for teaching computer appreciation in Colleges of Education in South- South Geo political zone of Nigeria. The design of the study is a descriptive design.

Table 1: Material Resources Available for Teaching Computer Appreciation in the Colleges of Education in South – South Geopolitical Zone of Nigeria

S/N	Items	Minimum standard for colleges of education	Number available	Percentage of availability	Decision
1.	Number of Computers	25	25	100%	Available
2.	Computer laboratory	1	1	100%	Available
3.	Uninterrupted power supply	5	2	40%	Moderately Available
4.	Soft ware materials	3	2	67%	Available
5.	Computer appreciation text books	1	1	100%	Available
6.	Power supply	1	1	100%	Available
7.	Monitor	20	20	100%	Available
8.	Drive	8	5	63%	Available
9.	Keyboard & mouse	25	10	40%	Moderately Available
10.	Stabilizer	20	17	85%	Available
11.	Internet – system	1	1	100%	Available
12.	Scanners	5	3	60%	Available
13.	Printer	5	2	40%	Moderately Available
14.	Computer projectors	1	1	100%	Available

Table 2: Adequacy of Material Resources in Colleges of Education

S/N	Items	Minimum standard for colleges of education	Number of human and material resources available	Percentage adequate	Decision
15	Numbers of computers	25	25	100%	Adequate
16	Computer laboratory	1	1	100%	Adequate
17	Uninterrupted power supply	5	2	40%	Inadequate
18	Software materials	3	2	67%	Adequate
19	Computer appreciation text books	1	1	100%	Adequate
20	Power supply	2	1	100%	Adequate
21	Monitor	20	10	50%	Adequate
22	Drive	8	5	63%	Adequate
23	Keyboard/mouse	25	10	40%	Inadequate
24	Stabilizer	20	17	85%	Adequate
25	Internet system	1	1	100%	Adequate
26	Scanners	5	3	60%	Adequate
27	Printers	5	2	40%	Inadequate
28	Computer projector	1	1	100%	Adequate

The population of the study comprised of 75 computer appreciation lecturers in South- South Colleges of Education in Nigeria. Ten institutions were studied. Due the small size of the population, the entire population was studied. A structured questionnaire covering questions on the availability and adequacy of material resources provided for teaching and learning of computer appreciation in business education department. was used for data collection. The mean and standard deviation was used for answering the research questions while the t-test was used to test the hypothesis at 0.05 level of significance.

Research Question 1: What are the material resources available for teaching computer appreciation in the Colleges of Education in South – South geopolitical zone of Nigeria?

Items 1 -14 were used to answer this research question. Summary of result is presented in Table 1.

Summary of results reveal that uninterrupted power supply, keyboards and mouse and printers are moderately available based on NCCE minimum benchmark, while number of computers, computer laboratory, Software materials, computer textbooks, power supply, monitor, drive, stabilizer, internet system, scanners and computer projections are available.

Research Question 2: How adequate are the material resources identified in colleges of education in the South-South Geo-political Zone in Nigeria??

Data collected with the checklist (Items 15 to 28) of the instrument were used to answer this research question. The National Commission for Colleges Education (NCCE) minimum standard was also used as a guide. Summary is presented in Table 2.

As shown in Table 2 number of computers, computer laboratories, software materials, computer appreciation text books, power supply, monitor, drive, stabilizer,

internet system, scanners and computer projector are adequate in supply in the colleges of education. Also going by the NCCE minimum benchmark the study discovered keyboard and mouse, uninterrupted power supply and printers were inadequate in supply in the colleges of education in the South-South geo-political zone.

DISCUSSION

The findings from the study show that uninterrupted power supply, key boards and mouse and printers are moderately available and the available ones are inadequate based on NCCE minimum Bench Mark (2012), while number of computers, computer laboratory, Software materials, computer textbooks, power supply, monitor, drive, stabilizer, internet system, scanners and computer projections are available and adequate.

The findings also revealed that computer units, computer laboratory, computer center, power supply, internet system and computer projector are adequate in supply in the colleges of education in the South-South geopolitical zone going by the NCCE minimum standard (2012). The inadequate provision of power supply, keyboards and mouse and printers are in agreement with the views of [7-9] who stated that the material resources for teaching computer science in Nigerian schools were substandard and inadequate. The findings equally disagreed with [10] who found that there were inadequate supply of tools and equipment in schools of business at the Federal College of Education (Technical) Asaba and Umunze. Similarly, the findings equally agreed with the findings of [11] that instructional equipment were grossly inadequate for effective teaching/learning of Business Education in the Universities and Colleges of Education studied.

[12], equally noted that business education programmes in Nigeria in most schools, lack modern teaching facilities, laboratories, workshops and instructional facilities to impact the knowledge and skills needed. She further noted that even when they are available, it is either they are not enough for the learners or obsolete. Colleges of Education in Delta State were also reported to have insufficient ICT teachers [13, 14] found that ICT is not adequately taught in the Universities and Colleges of Education offering business education. In a study carried out by [15] on colleges of education in the South Western geo political zone of Nigeria, he discovered that less than 35% of the sampled Colleges of Education use computers. In a study carried out by [16]

on the availability and adequacy of modern technological facilities in OTM option of N.C.E Business Education using Alvan Ikokwu College of Education as a case study; they found out that the facilities available are inadequate in number and that students are not adequately exposed to the available facilities.

Inadequacy of material resources will certainly militate against the effective teaching and learning of computer appreciation courses in colleges of education in South-South geopolitical zone of Nigeria. It is important that adequate instructional materials are provided for effective teaching and learning of computer appreciation in business education departments in colleges of education. This is because instructional materials provide concrete and realistic experiences that make learners develop faster understanding of the concepts to be learned [16].

Emphasizing on the relevance of instructional material Ezenu and Bloom in [16] noted that properly designed and fully utilized instructional facilities such as instructional materials enhance the effective delivery of school curriculum thereby increasing the academic performance of the pupil in any learning package. This is because instructional materials provide concrete and realistic experiences that make learners develop faster understanding of the concepts to be learned.

[17], stressed that for effective teaching and learning, material resources are basic tools, their absence or inadequacy makes the teacher handle subjects in an abstract manner, portraying it a dry and non exiting. It is also important to have appropriate personnel plan for adequate instructional materials and physical facilities to support educational effort. Learning materials are important because they can significantly increase student's achievement by supporting student's learning [18] He further observed that learning materials can also add important structure to lesson planning and the delivery of instruction. They act as a guide for both the teacher and students.

In his own contribution on the relevance of using material resources in teaching and learning, [19], explained that instructional materials can be used to ease, encourage, improve and promote teaching and learning activities. They can be used to facilitate effective instruction. They indicate a systematic way of designing, carrying out and employing the total process of learning and communication and employing human and non-human resources to bring out a more meaningful and effective instruction.

Supporting [20] indicated that the importance of instructional materials is to improve students' knowledge, abilities and skills to monitor their assimilation of information and contribute to their overall development and upbringing. It also clarifies important concepts to arouse and sustain student's interests, give all students in a class the opportunity to share experiences necessary for new learning, help make learning more permanent.

This affirms the vocational educators theory, that vocational education (which business education is an aspect of it) will be effective in proportion as the programme is provided with the same equipment and facilities as in the profession itself and not on exercise of pseudo jobs and that there is a minimum of these equipment and facilities, below which the programme should not be attempted [9].

CONCLUSION

The study examined the material resources available for the teaching of computer appreciation in Business Education in colleges of education in South-South geopolitical zone of Nigeria.

The study sought to identify the material resources available as well as determine the adequacy of the resources in teaching computer appreciation in colleges of education in South-South geopolitical zone. The researchers found out at the end of the study that some materials resources are moderately provided and inadequate in teaching computer appreciation. Such material resources are uninterrupted power supply, keyboard mouse and printers while other materials were available and adequately provided.

Recommendations: Based on the findings made and conclusions drawn, the researcher made the following recommendations:

- Uninterrupted power supply, provision of keyboard mouse and printers should be provided and adequately used while teaching and learning computer appreciation.
- Good storage facilities must be provided for safe keeping of the available facilities.
- Adequate maintenance of the facilities must be ensured for effective service delivery.

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