



Computer skills needed by business education students for effective job performance in automated office in Enugu state

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Abstract

The study investigated the computer skills needed by business education students for effective job performance in automated office in Enugu State. To find a solution to the gap created by location (male and female lecturers) in the discourse under investigation. Three research questions and three null hypotheses were formulated and tested at 0.05 level of significance. The researcher adopted a census survey research design for the study, while the total population of 23 business education lecturers was small and manageable. A- 36 item structured questionnaire Computer Skills for Business Education Students Scale (CSBESS) was used for data collection. The instrument was subjected to trial testing. Cronbach Alpha reliability estimate, a reliability coefficient of 0.81, 0.69 and 0.75 were obtained for clusters 1-3 respectively, while the overall reliability index was 0.75. Mean and standard deviation was used to answer the research questions while t-test statics was used to test the three null hypotheses that guided the study. Based on the results, the researchers concluded that word processing skills, spreadsheet skills and internet skills are computer skills needed by business education students for effective job performance in an automated office in Enugu State. Gender of the lecturers differ significantly. Based on the findings the researcher recommended that; among others, there should be deliberate efforts made at ensuring the effectiveness of the use of computer skills in teaching business education.

Keywords: automated office, business education, computer skills and job performance

Introduction

The world is undergoing rapid change in the fields of information communication and technology (ICT) and the role of the 21st-century teacher has to adapt accordingly to fit and exist in the said changes in the classroom. Nwabuko (2013) ^[8] noted that almost all the areas of human life today require knowledge of the computer. It is therefore mandatory for the modern-day teacher to be highly computer literate to be able to assist learners to fit well into modern society.

Organizations of all types and sizes, including schools, have recognized that the usage of computers in the work environment is important as it presents unprecedented challenges that help individuals to acquire an inquiring critical, and creative mind to capitalize on the opportunities driven by the explosive growth of information knowledge and technology (Kumar, Rose & D'Silva, 2011) ^[7]. The present human society is the age of information explosion in which an average individual wants to explore the information system, thus the ability for timely acquisition, utilization, communication and retrieval of relevant and accurate information has become an important attribute for better teaching and learning process (Adeboye, 2014) ^[1].

FRN (2014) stated that in recognition of prominent role of ICT in advancing knowledge and skills necessary for effective functioning in the modern world, there is an urgent need to integrate ICT into education in Nigeria. The integration of computers in education has helped to develop positive changes in educational institutions and communities. The positive changes brought in by appropriate infrastructure and ICT facilities encompassing electricity, telephone, educational software, internet facility and hardware such as computers, scanners and multimedia projectors (Satharasinghe, 2017) ^[12]. It is a worthy of note that ICT doesn't exist in isolation because the world has grown into a global village and its functionalities are mostly carried out in an office.

An office is generally a room or an area where people work. It may be a position within an organization with specific duties attached to it (Osuala, 2014). In the words of Okeke (2016) ^[5], an office is any room in which a particular kind of business is transacted or service provided. It is a place in which the transactions such as consulting, record-keeping, clerical work among others of a public or private enterprise are performed. It is a focal point of correlating the service and profit-making activities of a business. Agomuo (2015) defined an office as a place where administration, that is the management and handling of information takes place. He further explained that an office can range from a small place for a clerk on a construction site to a highly furnished place. In this modern world, majorly every activity carried out in an office is highly computerized.

The term "Computer" has been defined by different people in different ways. Thompson in Ejiofor, Okeke, and Enemuoh (2016) ^[5] defined a computer as an electronic device or system, which has the ability to accept data

internally, store data or results, and automatically performs manipulative and logical operations on the data based on instruction, with the result of processing, released as information. Computer is an electronic device that on receipt of an appropriate input is capable of processing the input according to a set of previously supplied instructions and making the result available as output if desired. Based on these definitions, it can be deduced that a computer is: An electronic device; A system; A device that processes data at the central processing unit; A device that stores information or data; A system that retrieves or gives feedback information when required; A system that goes with the famous principle GIGO (Garbage-In, Garbage-Out). Taskshile (2019) ^[13] referred to a computer as a system that has a combination of software and hardware. Taskshile further noted that the physical and tangible parts of a computer that are seen and touched are known as the hardware, such as the; keyboard, mouse, scanner, printer, speaker, monitor, central processing unit (CPU) and others. While the software represents the set of programmes and instructions that govern the operation of a computer system. A computer system cannot do anything on its own, it must be instructed to perform a specific task and therefore, to solve a problem the user has to specify the sequence of instructions which a computer must follow (Anikene, 2011) ^[4] Such sequence of instruction is called “programme” and is written in a language understood by the computer (Nwabuko, 2013) ^[8].

It is worthy to note that a computer system or its programmes cannot be adequately utilized without adequate skills for operation. Some common computer skills according to Ugwuanyi (2018) ^[14] include, analytics, social media, graphics design, Microsoft office, spreadsheets, email communication, marketing automation and data visualization operational skills. Anikene (2011) ^[4] noted that the types of computer office skills employers expect will vary depending on the career or industry, Anikene, further asserted that some of the most important computer skills include; operating system, office suites, presentation software, spreadsheets, communication and collaboration tools, accounting software, social media and data visualization. Okorie and Nwangwu (2011) ^[10] stated that in teaching business education students, the following basic computer skills are needed, they include; word-processing office skills, spreadsheet office skills, and internet office skills among others.

Word-processing office skills involve the ability to prepare a standard document like letters memos, notices, reports, wills, agreements among others. With the aid of a processor or a computer using any available word processing software like; Word perfect, Word star, Microsoft, MultiMate, Print master, First choice and Sign master among others (Anikene, 2011) ^[4]. Opie (2013) ^[11] asserted that word-processing skills refers to efficient use of computer programme that provide for input, editing, formatting and output of text, among other additional factors.

Spreadsheet office skills involve the use of computer applications for organizing, analyzing and storage of data in tabular form. Okorie and Nwangwu (2011) ^[10] noted that a spreadsheet allows for the manipulation of large amounts of data. Spreadsheet skills are used to calculate numbers, compare and analyze data and use the data for report preparation and preparation and presentation. Tokshile (2018) noted that an excellent mastery of spreadsheets application is among the top computerized office skills in the 21st century skills list for computer education students. It makes for a convenient and highly methodological way of conducting some of the most pertinent aspect of teaching duties.

Internet office skills involve the ability to explore, give or receive information through the internet. It is a computer skill that makes use of the software called *browser* which allows the user to connect to the internet (Ogundele and Etejere, 2013) ^[9]. The internet skills involve opening websites by entering the Uniform Resource Locator (URL) in a browser location bar; navigating forward and background between pages using browser button; saving files on a hard disk; opening various common file formats such as PDF, among other (Opie, 2013) ^[11]. And these skills can be measured with respect to gender.

Gender may be seen as a challenge in the computer skills needed by business education students for effective job performance in automated offices in Enugu State. Gender is a socially learned behaviours and expectation associated with males and females (Azikiwe, 2011). It is described as the biological sex of individuals in terms of being male or female. In Nigerian societies there are differences and inequalities between woman and men in responsibilities assigned, activities undertaken, access to and control over resources as well as possession of skills (Ugwanyi, 2018) ^[14]. Ogundele and Etejere (2013) ^[9] revealed that females are faster in typing skills than males, however males poses mmore internetskills than females. Study by Alaje (2013) ^[3] reported that female students possessed efficient computer skills and used social media more than their male counterparts. Adeboye (2014) ^[1] contended that male students are found to be more active and possess computer skills than their female counterparts.

Although this area of study is well established in the literature, little research work has been done on the topic in Enugu state. This study therefore is intended to make a contribution towards filling this gap. To this end, the current study examined computer skills needed by business education students for effective job performance in automated office in Enugu state

Statement of the Problem

Effective integration of ICT into the Nigeria Education System requires the teachers to be at the fore front of ICT access and usage in teaching of business education in Enugu state. Computer facilities are not provided sufficiently for teaching of business education, thereby resulting to a deficiency in computer skills of the business education students as well as failure in the preparation of learners for the technological world that they would encounter after school. Most business education teachers lack the basic and necessary computer skills in

the teaching of computer to business education students for effective job performance in automated office in Enugu State. This unfortunate situation resulted to a theoretically based teaching of computer in schools at the expense of the practical aspects of computers, which limits learners experience and needed computer skills by business education students for effective job performance in automated office.

Furthermore, business education students needs to be equipped with the basic and necessary computer skills for effective job performance in Automated office in Enugu State. Researches have been carried out on computer skills needed for teaching of business education, yet no study to the best knowledge of the researcher investigated the computer skills needed by business education students for effective job performance in automated office in Enugu State. These prevailing condition formed the researcher's choice to carry out this study, thus, the problem of this study put in question form, "what are the computer skills needed by business education students for effective job performance in automated office in Enugu State".

Purpose of the Study

The main purpose of this study is to determine the computer skills needed by business education students for effective job performance in automated office in Enugu State. Specifically, this study sought to investigate;

1. word processing skills needed by male and female business education students for effective job performance in automated offices in Enugu State.
2. spreadsheet skills needed by male and female business education students for effective job performance in automated offices in Enugu State.
3. Internet skills needed by male and female business education students for effective job performance in automated offices in Enugu State.

Research Questions

The following research questions guided the study;

1. What word processing skills are needed by male and female business education students for effective job performance in an automated office in Enugu State?
2. What are the spreadsheet skills needed by male and female business education students for effective job performance in automated office in Enugu State?
3. What are the internet skills needed by male and female business education students for effective job performance in automated office in Enugu State?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance;

1. There is no significant difference in the mean response scores of male and female business education students on word processing skills needed for effective job performance in automated office in Enugu State.
2. There is no significant difference in the mean response scores of male and female business education students on spreadsheet skills needed for effective job performance in automated office in Enugu State.
3. There is no significant difference in the mean response scores of male and female business education students on internet skills needed for effective job performance in automated office in Enugu State.

Method

A Census survey research design was adopted for this study. The area of the study is Enugu State Nigeria. The population for the study comprised all the 23 business education Lecturers in the public universities (ESUT and UNN) in Enugu State. The entire population of 23 business education Lecturers comprised 9male Lecturers and 14 female Lecturers in Enugu State was used for the study. No sampling was done because the population was manageable. A-36 item structured questionnaire named "Computer Skills for Business Education Students Scale (CSBESS)" developed by the researchers was used for data collection. The instrument had two sections; A and B. Section A contains the respondent's bio data while section B is divided into three clusters with 36 items structured questionnaire that assisted the researcher in providing clues to the research questions that guided the study. Cluster 1, was on the word processing skills with 11 items, cluster 2 was on the spreadsheet skills with 14 items, cluster 3 was on the internet skills with 11 items. The response format for the instrument is 4-point scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The respondents responses were used to assess the extent to which the items would serve as the computer skills needed by business education students for effective job performance in automated office in Enugu State. The reliability of the instrument yielded the following reliability coefficient; cluster 1 had 0.81, cluster 2 had 0.69, and cluster 3 had 0.75. The overall reliability coefficient was 0.75, indicating that the instrument is reliable and suitable for the study. The questionnaire was administered and retrieved by the researcher with the help of a research assistants that were properly briefed on the content of the questionnaire and its administration to ensure that the questionnaire were properly administered. The data collected with the questionnaire were analyzed using Mean (\bar{x}) with Standard Deviation (SD) to answer each of the three research questions. However, each of the three hypotheses were tested using t-test statistics at 0.05 level of significance.

Results

Research Question 1: What word processing skills are needed by male and female business education students for effective job performance in an automated office in Enugu State?

Table 1: Mean responses and standard deviation of the respondents on the word processing skills needed by male and female business education students for effective job performance in automated office in Enugu State.

N=23

S/N	Word processing skills needed include;	Male = 9			Female = 14		
		\bar{x}	SD	Dec	\bar{x}	SD	Dec
1.	Preparation of documents	2.86	0.99	Agree	3.45	0.98	Agree
2.	Improvement of typing skills	2.96	0.87	Agree	2.67	0.89	Agree
3.	Editing of word documents	2.76	0.97	Agree	2.47	0.90	Disagree
4.	Formatting of word document	2.55	1.06	Agree	2.96	0.89	Agree
5.	Deleting of word documents	2.66	1.03	Agree	2.55	0.82	Agree
6.	Rearranging of word document	2.81	0.99	Agree	2.54	0.90	Agree
7.	Space out of typed word document	2.56	1.09	Agree	3.00	0.78	Agree
8.	Saving of word document	2.43	1.09	Disagree	2.55	1.82	Agree
9.	printing of word document	2.82	0.98	Agree	2.71	0.72	Agree
10.	Recording of information	2.94	0.99	Agree	3.01	0.89	Agree
11.	Mastery of the keyboard system	2.87	1.01	Agree	2.52	1.52	Agree
	Grand Mean	2.74	1.00		2.77	0.90	

Source: The Researcher

From Table 1 above, the results of data analysis for research question 1 indicated that all the items except item 3 (under female lecturer) had mean responses that were higher than the cut-off point of 2.50. The value of the grand mean was also high at 2.74 as well as the standard deviation for the male lecturer and 2.77 for the female lecturer and high standard deviation indicates that the respondents responses were homogenous. This implied that the respondents agreed that all the items were word processing skills needed by male and female business education students for effective job performance in automated office in Enugu State.

Research Question 2: What are the spreadsheet skills needed by male and female business education students for effective job performance in automated office in Enugu State?

Table 2: Mean responses and standard deviation of the respondents on the spreadsheet skills needed by male and female business education students for effective job performance in automated office in Enugu State.

N=23

S/N	Spreadsheet skills needed include;	Male = 9			Female = 14		
		\bar{x}	SD	Dec	\bar{x}	SD	Dec
12.	Comparing of data	3.24	0.73	Agree	3.57	0.49	Agree
13.	Storage of data	3.24	0.75	Agree	2.55	1.16	Agree
14.	Preparation of data reports	2.80	1.06	Agree	3.02	0.79	Agree
15.	Presentation of data reports	2.49	1.12	Disagree	2.55	1.16	Agree
16.	Drawing if pie-chart	2.83	0.99	Agree	2.59	1.11	Agree
17.	Graphical presentation of results	3.10	0.76	Agree	3.57	0.49	Agree
18.	Drawing of line- charts	3.04	0.84	Agree	2.58	1.10	Agree
19.	Drawing of bar charts	2.97	0.98	Agree	2.58	1.10	Agree
20.	Frequency distribution	2.77	1.03	Agree	3.57	1.12	Agree
21.	Obtaining of standard deviation	2.98	0.89	Agree	2.58	1.10	Agree
22.	Obtaining of net present values	2.73	1.08	Agree	3.57	0.49	Agree
23.	Obtaining of data variance	2.98	0.83	Agree	3.02	0.72	Agree
24.	Financial model	2.73	1.09	Agree	3.57	0.49	Agree
25.	Result computation	2.71	1.03	Agree	2.55	1.16	Agree
	Grand Mean	2.90	0.94		2.90	0.92	

Source: The Researcher

From Table 2 above, the results of data analysis for research question 2 indicated that all the items except item 15 (under male lecturer) had mean responses that were higher than the cut-off point of 2.50. The value of the grand mean was also high at 2.90 as well as the standard deviation for the male lecturer and 2.90 for the female lecturer and high standard deviation indicated that the respondents' responses were homogenous. This implied that the respondents agreed that all the items were spreadsheet skills needed by male and female business education students for effective job performance in automated office in Enugu State.

Research Question 3: What are the internet skills needed by male and female business education students for effective job performance in automated office in Enugu State?

Table 3: Mean responses and standard deviation of the respondents on the internet skills needed by male and female business education students for effective job performance in automated office in Enugu State.

N=23

S/N	Internet skills include;	Male = 9			Female = 14		
		\bar{x}	SD	Dec	\bar{x}	SD	Dec
26.	Retrieval of information through email	3.70	0.46	Agree	3.20	0.93	Agree
27.	Sending of information through email	3.69	0.47	Agree	3.03	0.67	Agree
28.	Saving of files from the internet	3.57	0.84	Agree	3.17	1.02	Agree
29.	Presenting lessons on power point	3.40	0.79	Agree	3.07	0.87	Agree
30.	Communicating students using social media	3.34	0.88	Agree	2.63	0.85	Agree
31.	Obtaining information through Google search engine	2.55	1.16	Agree	3.40	0.97	Agree
32.	Delivery of information through PDF formats	3.65	0.73	Agree	2.87	0.97	Agree
33.	World wide web publishing	3.67	0.71	Agree	2.93	1.14	Agree
34.	Access to online based information	3.91	0.32	Agree	2.87	0.97	Agree
35.	Web designing	3.73	0.55	Agree	3.47	0.50	Agree
36.	E- learning programmes	3.66	0.69	Agree	3.20	1.09	Agree
	Grand Mean	3.52	0.69		3.08	0.91	

Source: The Researcher

From Table 3 above, the results of data analysis for research question 3 indicated that all the items (both male and female lecturer) had mean responses that were higher than the cut-off point of 2.50. The value of the grand mean was also high at 3.52 as well as the standard deviation for the male lecturer and 3.08 for the female lecturer and high standard deviation indicated that the respondents' responses were homogenous. This implied that the respondents agreed that all the items were internet skills needed by male and female business education students for effective job performance in automated office in Enugu State.

Hypothesis 1: There is no significant difference in the mean responses scores of male and female business education students on word processing skills for effective job performance in automated office in Enugu State.

Table 4: t-test on the mean ratings of male and female business education students on word processing skills for effective job performance in automated office in Enugu State.

Gender	N	Mean	Std. Deviation	t	df	Sig.	Dec.
Male	9	3.09	0.85	0.260	21	.293	S
Female	14	2.77	0.90				

Source: The Researcher

Table 4 shows that the t value for the difference in mean rating of male and female business education students on word processing skills for effective job performance in automated office in Enugu State is 0.260, significant at .293 level of significance, which is higher than 0.05 set for the study. The null hypothesis is therefore rejected. This means that there was a significant difference in the mean ratings of male and female business education students on word processing skills for effective job performance in automated office in Enugu State.

Hypothesis 2: There is no significant difference in the mean responses scores of male and female business education students on spreadsheet skills for effective job performance in automated office in Enugu State.

Table 5: t-test on the mean ratings of male and female business education students on spreadsheet skills for effective job performance in automated office in Enugu State.

Gender	N	Mean	Std. Deviation	t	df	Sig.	Dec.
Male	9	2.99	1.09	.220	21	.440	S
Female	14	3.54	0.69				

Source: The Researcher

Table 5 shows that the t value for the difference in mean rating of male and female business education students on spreadsheet skills for effective job performance in automated office in Enugu State (-.220), significant at (.440) level of significance, which more than (0.05) set for the study. The null hypothesis is therefore rejected. This means that there was a significant difference in the mean ratings male and female business education students on spreadsheet skills for effective job performance in automated office in Enugu State.

Hypothesis 3: There is no significant difference in the mean responses scores of male and female business education students on internet skills for effective job performance in automated office in Enugu State.

Table 6: t-test on the mean ratings of male and female business education students on internet skills for effective job performance in automated office in Enugu State.

Gender	N	Mean	Std. Deviation	t	df	Sig.	Dec.
Male	9	3.28	0.88	0.210	21	.040	NS
Female	14	3.07	0.74				

Source: The Researcher

Table 6 shows that the t value for the difference in mean rating of male and female business education students on internet skills for effective job performance in automated office in Enugu State (0.210), significant at (.040) level of significance, which less than (0.05) set for the study. The null hypothesis is therefore not rejected. This means that there was no significant difference in the mean ratings of male and female business education students on internet skills for effective job performance in automated office in Enugu State.

Discussion of Findings

The findings of this study were discussed in line with the research questions that guided the study and hypotheses tested. Research question one, attempted to elicit the perception of the respondents on the word processing skills needed by business education students for effective job performance in automated office in Enugu State. Out of the eleven items articulated to answer the research question posed only one item under female lecturer got a mean point that indicated disagree. The majority response however agreed that word processing skills is needed foreffective job performance in automated office in Enugu State. The comparison between the mean response scores of male and female lecturer on the word processing skills needed effective job performance in automated office in Enugu State showed that there was a significant difference in the mean ratings of male and female lecturer. Research question two sought to find out the spreadsheet skills needed by business education students for effective job performance in automated office in Enugu State. The findings revealed that spreadsheet skills needed for effective job performance in automated office in Enugu State with all the mean items than were above 2.50 Comparison on the mean rating of male and female lecturer on spreadsheet skills are needed effective job performance in automated office in Enugu State showed that there was a significant difference in the mean ratings of male and female lecturer. The findings in research question three indicated that internet skills are needed for effective job performance in an automated office in Enugu State, with all the items articulated to answer the research question posed with an average mean above 2.50 Comparison on the mean rating of male and female lecturer on internet skills are needed effective job performance in automated office in Enugu State showed that there was no significant difference in the mean ratings of male and female lecturer.

Conclusion

Based on the findings of the study and the discussion that followed, conclusions were drawn as follows: Word processing skills are needed for effective job performance in an automated office in Enugu State. Gender of lecturers differ significantly on the word processing skills are needed for effective job performance in an automated office in Enugu State. Spreadsheet skills are needed for effective job performance in an automated office in Enugu State. Gender of lecturers differ significantly on the spreadsheet skills are needed for effective job performance in an automated office in Enugu State. Internet skills are needed for effective job performance in an automated office in Enugu State. Gender of lecturers do not differ significantly on internet skills are needed for effective job performance in an automated office in Enugu State.

Recommendations

Based on the findings and implication of the results, the following recommendations are made;

1. Deliberate efforts should be made at ensuring the effectiveness in use of word Processing skills in teaching business education.
2. There should be seminar and conferences for business education students to educate them on the needed Spreadsheet skills for excelling in the cooperate office.
3. There should be in-service training for business education Students and lectures in Internet skills to enable them utilize the curriculum content for business education students.
4. Government should regulate laws that will make our teaching institutions to be more practical oriented than theory.

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