SUPERVISORS' RATINGS OF COMPUTER SKILLS POSSESSED BY SECRETARIES FOR EFFECTIVE WORK PERFORMANCE IN COLLEGES OF EDUCATION IN DELTA STATE

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Abstract
The study was undertaken to determine supervisors' ratings of the extent computer skills are possessed by secretaries for effective work performance in colleges of education in Delta State. The study adopted the survey research design and was guided by four research questions while four null hypotheses were tested at 0.05 level ofsignificance. The entire population of 132 supervisors (deans, heads of departments and directors of programmmes) in the four colleges of education in Delta State was used for the study. A 40 item structured questionnaire with five response options was used for data collection. The questionnaire was validated by three experts and its reliability co-efficient of 0.86 was calculated using Pearson Product Moment Correlation. Data relating to the research questions were analyzed using mean and standard deviation while analysis of variance (ANOVA) was used to test the four null hypotheses. The study found that secretaries in colleges of education in Delta State possessed word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills at a moderate extent. Respondents' mean ratings were not significantly influenced by their qualifications and designations. Based on the findings, it was concluded that the moderate possession of computer skills by secretaries in colleges of education in Delta State may be affecting their effective performances in the present technology driven era. It was recommended among others that authorities of colleges of education in Delta State should regularly organize retraining programmes for secretaries on the usage of computer and its applications.

Keywords: Internet, Secretaries, Skills, Spreadsheet, Power-Point, Word-Processing

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Introduction

The introduction of information and communication technology which is largely symbolized by computer has altered the system of office information generation, acquisition, processing, storage and dissemination. As a result, the business environment all over the world has witnessed tremendous changes in its traditional methods and practices. Office secretaries fall among office personnel who have come face-to-face with the challenges of this information and communication and technology because they handle numerous office functions related to information processing.

A secretary is a member of staff who is concerned with the preparation, preservation and transmission of different types of office documents as well as conventional secretarial duties of confidential nature at various levels in an organization. The brochure of European Association of Professional Secretaries cited in Enyekit (2006) defined a secretary as one who has sufficient knowledge of his boss's activities and the type of work to do to be able to have considerable amount of work delegated to him or her. This implies that a qualified secretary should possess basic secretarial skills, have sufficient business acumen, be versatile in office information and communication technology and have sufficient knowledge of the operations of all departments within the organization where he or she works.

The secretary is always referred to as the 'hub' on which other activities of the office revolve. This is because the secretary's duties do not end with mere keeping and retrieving of valuable office documents but include other functions necessary for the smooth running of the office. This point is buttressed by Ejeka (2004) who defined a secretary as an executive assistant who possess a mastery of office skills and abilities to assume responsibilities without direct supervision. Ejeka maintained that a secretary displays initiative, exercises judgment and takes decisions within the scope of his authority. This applies in situations where a secretary is required to assume responsibilities, make decisions and work independently. In the same vein Adozoga and Massnawa (2003) posited that a secretary is an important officer in any establishment whose contribution and effectiveness will either enhance or diminish the efficiency of an organization.

In the context of traditional office system, a secretary was responsible for performing the routine jobs of typing various office documents such as letters, memos, reports and manuscripts, taking notes in shorthand and translating same with typewriter. Most of the methods of executing these traditional roles are now seen as rather crude since they could only make little contribution to efficient work performance in the modern technology driven offices. Information and communication technology has brought about new ways of conducting business in the form of electronic commerce, electronic banking, electronic mail among others. Secretaries in most cases do not seem to depend any longer on the traditional methods of collecting, sorting, processing and dissemination of information, rather the

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computer and other complementary gadgets are now being used to perform these functions. The implication is that modern office activities have gone beyond typewriting and note taking at high speed and transcribing same, it is therefore expected of secretaries to possess relevant skills and competencies to use the computer and other gadgets for effective work performance in the computerized business offices. These computer skills may include word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills among others.

Word processing skills cover the ability to use a word processor such as 'Microsoft Word' to process textual materials and documents such as letters, memos, reports, minutes and so on. Word processing skills are required in almost every office job. A word processing application can be used in a computer to create, save, edit, format and print all kinds of documents. Electronic spreadsheet is another aspect of computer application skills which secretaries need in modern business offices. With spreadsheet application such as MS Excel, information is easily displayed and formulas can be inserted to manipulate data. Information can also be sorted and filtered on the spreadsheet application. Such information is usually useful for decision making.

Apart from the spreadsheet application, another crucial modern technology is the internet. The use of internet application skill to carryout online office activities seem to be dominant in modern business offices especially among secretaries who are at the centre of day-to-day administration of business organizations. The introduction of internet in office administration has recorded remarkable improvement in business performance. In addition to the explosion in online business opportunities and breakthroughs, secretaries communicate with bosses, workers and colleagues through e-mail and other online chats/applications. Mbaezue (2010) posited that e-mail is a widely used internet application that enables individuals or group of individuals to quickly exchange messages even if they are separated by long distance. Power-point presentation is another computer application system which enables users to create powerful presentation to their audience. Power-point is mainly used during seminars, workshops, conferences as well as other staff training and development programmes. It allows the user to include formatted text, graphics, pictures, sounds, videos and animations in the presentation. Ndukwe (2005) noted that presentation created with power-point can add audio and visual effects, making them look professional or flashy to meet high standard presentation.

Secretaries are expected to possess computer skills for effective work performance in their organizations as a result of the emerging technologies. The extent to which secretaries in colleges of education possess these computer skills will determine their level of effectiveness and efficiency in responding to the needs of the present computerized offices. However, the trend in office system applications is that different organizations appear to lay emphasis on specific areas relevant to them but all the aforementioned computer applications are very relevant to duties of secretaries

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in colleges of education. This necessitated the study to ascertain the assessment of supervisors in colleges of education in Delta State on the extent their secretaries possess skills in computer applications for effective work performance.

For the purpose of this study, supervisors are management staff in the colleges of education who assign responsibilities to secretaries working under them. They include the Heads of department/units, Deans of schools and Directors of both academic and non-academic programmes, Bursars, College Librarians, Registrars and Provosts. These management staff supervise secretaries directly and regularly in their official assignments. The close work relationship between these supervisors and their secretaries enable them to understand the areas of strengths and weaknesses of their secretaries. As a result, they have both the knowledge and experience required to rate their secretaries' possession of computer skills. A number of variables that could influence supervisors' ratings of their secretaries' possession of computer skills include educational qualifications of the supervisors as well as the position or designations which they occupy in the organisation. It is expected that the highly qualified or experienced secretaries perform secretarial duties for top-level executives and for those with higher educational qualifications. So, the ratings by these top-level supervisors and those with higher educational qualifications may differ with their counterparts because their secretaries are likely more qualified and experienced. Therefore, the effect of supervisors' designation and educational qualification on their responses was also investigated in the study.

Statement of the Problem

The introduction of sophisticated technological equipment and applications has significantly altered the secretary's method and process of work performance. According to Oduma (2006), the technological trends in modern office had not only caused some jobs to disappear in direct correlation with the amount of training in such jobs, but the emergence of previously unknown office equipments and applications. A good number of practicing secretaries in public offices (including educational institutions) were trained when major emphasis was on typewriting and shorthand. Thus, they need to acquire and possess relevant computer skills for effective work performance in order to contribute positively to the growth and development of their modern organizations.

The problem of this study therefore, is that the extent secretaries in colleges of education in Delta State possess relevant computer skills for effective work performance is not clearly known. An empirical study is required to guide stakeholders on objective measures of extent of computer skills possessed by secretaries and to ensure that professionals meet the need of the present technology era. Hence, this study on supervisors' ratings of computer skills possessed by secretaries in colleges of education in Delta State was undertaken.

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Purpose of the Study

The study was conducted to determine supervisors' ratings of computer skills possessed by secretaries for effective work performance in colleges of education in Delta State. Specifically, the study ascertained the ratings of supervisors in colleges of education in Delta State on the extent their secretaries possess word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills.

Research Questions

The following research questions were posed to guide the study.

1. What is the extent of word-processing skills possessed by secretaries in colleges of education in Delta State?
2. What is the extent of electronic spreadsheet skills possessed by secretaries in colleges of education in Delta State?
3. What is the extent of internet application skills possessed by secretaries in colleges of education in Delta State?
4. What is the extent of power-point presentation skills possessed by secretaries in colleges of education in Delta State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess word processing skills based on designation.
2. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess electronic spreadsheet skills based on designation.
3. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess internet application skills based on educational qualifications.
4. Supervisors do not differ significantly in their mean ratings on the extent secretaries in colleges of education in Delta State possess power-point presentation skills based on educational qualifications.

Method

The study adopted the descriptive survey design and was conducted in the four colleges of education in Delta State. They were College of Education, Agbor; College of Education, Warri; College of Education, Mosogar and Federal College of Education (Technical), Asaba. The population of the study comprised all the 132 Supervisors (Deans, Directors and HODs) of academic and non-academic units in the four colleges of education who have secretaries working under them. The entire population was used for the study without sampling because it was not too large. Questionnaire was used to gather data for the study. The questionnaire consisted of

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two parts. Part I contained two items on respondents' personal data such as designation and educational qualification while Part II has four sub-sections (A, B,C and D) containing a total of 40 items on a 5-point rating scale of Very Great Extent (VGE); Great Extent (GE); Moderate Extent (ME); Small Extent (SE) and Very Small Extent (VSE).

The questionnaire was validated by three experts (one instrument expert and two content experts) in terms of clarity of language, items relatedness to purpose of the study and content coverage. Their inputs were considered in preparing the final draft of the questionnaire. The reliability of the questionnaire was established through test re-test using 10 supervisors (five from College of Education, Ekiadolor and five from College of Education, Igueben, both in Edo State). The data generated thereof were subjected to Pearson Product Moment correlation analysis which yielded a coefficient index of 0.86. This coefficient value is indicative of high reliability.

The questionnaire was administered to the respondents by the researchers and three assistants who were briefed on instrument administration and retrieval. The entire 132 copies of the questionnaire distributed were successfully collected and used for data analysis. The data collected were analysed using mean and standard deviation to answer the research questions while Analysis of Variance (ANOVA) was used to test the null hypotheses at 0.05 level of significance. Decision on the research questions was based on the boundary limits of five point rating scale while null hypothesis was upheld where the value of F-calculated was less than the value of F-critical and rejected where the value of F-calculated was greater than or equal to the value of F-critical.**Results**

The results and interpretations are presented in the following tables according to the research questions and hypotheses.

Table 1
Respondents' Mean Ratings on the Extent Secretaries Possess Word Processing Skills

S/N	Word Processing Skilss	π	SD	Remarks
1	Ability to load a word processing application software e.g MS Word	4.77	0.74	VGE
2	Creating and organizing computer files and folders	3.77	0.81	GE
3	Ability to use storage devices(hard disk, diskette, CD, flash etc) for storing and sharing files	3.64	1.15	GE
4	Use input devices to enter and edit text	3.05	1.39	GE
5	Copy, cut and paste text	3.58	1.55	GE
6	Insert pictures and symbols into a document with	2.09	0.80	

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	correct margin and layout			SE
7	Change text font style and size in a document	4.41	1.14	GE
8	Create and format table in a document	1.38	0.73	VSE
9	Use Word Art to create and shape text in a document	2.36	1.19	SE
10	Preview, print and save text in a word processing	4.01	1.32	GE
	Grand Mean	**3.31**		**ME**

Table 1 shows that the supervisors rated items 1 and 8 as very great extent and very small extent respectively, while items 6 and 9 were rated by the supervisors as small extent. The other items (2, 3, 4, 5, 7 and 10) were adjudged by the supervisors to be great extent. The close range of standard deviation of the responses further shows that supervisors were not far in their ratings. However, the grand mean of 3.31 which falls within the range of 2.50-3.49 indicates that secretaries in colleges of education in Delta State posses word processing skills to a moderate extent.

Table 2
Respondents' Mean Ratings on the Extent Secretaries' Possess Electronic Spreadsheet Skills

S/N	Electronic Spreadsheet Skills	π	SD	Remarks
11	Opening a spreadsheet application software	4.64	0.78	VGE
12	Ability to adjust column's width and row's height	3.33	1.10	ME
13	Entering and sorting data in worksheet	2.11	1.26	SE
14	Ability to create formula to carryout arithmetic computation in a worksheet	1.36	0.72	VSE
15	Naming/renaming a worksheet	4.36	1.00	GE
16	Merging and centering data in a worksheet	2.00	0.62	SE
17	Inserting borders, columns and rows	2.02	0.68	SE
18	Deleting columns and rows	2.64	1.30	ME
19	Ability to create editing and formatting charts and graph using spreadsheet application	2.14	1.23	SE
20	Previewing, printing and saving a worksheet	4.64	0.93	VGE

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	Grand Mean	**2.92**	**ME**

As presented in Table 2, the supervisors rated items 11 and 20 as very great extent while item 14 was rated as very small extent. Furthermore, the supervisors rated item 15 as great extent, items 12 and 18 as moderate extent, while items 13, 16, 17 and 19 as small extent. However, the close range of standard deviation of the responses further indicates that the supervisors were homogenous in their ratings. The grand mean (2.92) which falls within the range of 2.50-3.49 implies that electronic spreadsheet skills were rated by supervisors as being moderately possessed by secretaries in colleges of education in Delta State.

Table 3
Respondents' Mean Ratings on the Extent Secretaries Possess Internet Application Skills

S/N	Internet Application Skills	π	SD	Remarks
21	Ability to access internet application software or web browser	4.80	0.40	VGE
22	Creating an e-mail account	3.12	1.14	ME
23	Opening and composing mail online	3.02	1.42	ME
24	Sending and receiving mails with attachment	3.52	1.41	GE
25	Controlling junk e-mail messages	1.75	0.91	SE
26	Ability to communicate with colleagues and clients online	2.11	1.42	SE
27	Ability to use shared devices within a network	1.89	0.60	SE
28	Refreshing and saving a web page	2.20	1.33	SE
29	Downloading information from the internet	3.08	1.23	ME
30	Uploading information into the internet	1.51	0.09	SE
	Grand Mean	**3.00**		**ME**

The results shown on Table 3 revealed that the supervisors rated item 21 as very great extent, item 54 as great extent and items 52, 53, 59 as moderate. The other items (25, 26, 27, 28 and 30) were rated by the supervisors to be small extent. The close range of standard deviation of the responses further indicates the closeness of supervisors in their ratings. The grand mean of 3.00 which is within 2.50-3.49 shows

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that the secretaries in colleges of education in Delta State possess internet application skills to a moderate extent as rated by their supervisors.

Table 4
Respondents' Mean Ratings on the Extent Secretaries' Possess Power-Point Skills

S/N	Power-Point Presentation Skills	π	SD	RemarkS
31	Opening a Power point work environment	4.93	0.55	VGE
32	Ability to create slides using different layouts	2.35	1.14	SE
33	Adding titles and subtitles to a slide	2.80	1.04	ME
34	Changing font and sizes of text in a slide	2.80	1.46	ME
35	Ability to copy and paste objects and pages	4.25	1.34	GE
36	Inserting images in a presentation	2.18	1.27	SE
37	Adding sounds and animation in a presentation	2.00	0.83	SE
38	Running a slide show in a power point	1.98	0.97	SE
39	Printing out and storing slide presentation	2.25	1.27	SE
40	Ability to make a presentation using slides and projectors	2.10	0.67	SE
	Grand Mean	**2.76**		**ME**

The results presented in Table 4 revealed that the supervisors rated item 31 as very great extent and item 25 as great extent, while items 33 and 34 were rated as moderate extent. Items 32, 36, 37, 38, 39 and 40 got mean ratings of small extent. The close range of standard deviation of the responses further shows that the supervisors were not far apart in their ratings. Since the grand mean of 2.76 which is within the range of 2.50 and 3.49, it indicates that the supervisors rated power-point skills as being moderately possessed by secretaries in colleges of education in Delta State.

Table 5
Summary of Analysis of Variance (ANOVA) for Hypothesis One

Source of Variance	Sum of Squares	Df	Mean of Squares	F-cal	F-crit	Decision
Between groups	59.46	2	29.73	2.95	2.99	Not
Within groups	1299.47	129	10.07			Significant
Total	**1358.93**					

The result on Table 5 shows that the calculated value of F (2.95) is less than the critical value of F (2.99) at 0.05 level of significance. This implies that supervisors did not differ significantly in their mean ratings on the extent of word processing

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skills possessed by secretaries for effective work performance in Colleges of Education in Delta State as a result of designation. Therefore, the null hypothesis was upheld.

Table 6
Summary of Analysis of Variance (ANOVA) for Hypothesis One

Source of Variance	Sum of Squares	Df	Mean of Squares	F-cal	F-crit	Decision
Between groups	48.68	2	32.28	2.88	2.99	Not
Within groups	1719.51	129	15.18			Significant
Total	**1768.19**					

The result on Table 6 shows that the F-calculated value of 2.88 is less than the critical F-value of 2.99 at 0.05 level of significance. This implies that supervisors did not differ significantly in their mean ratings on the extent of electronic spreadsheet skills possessed by secretaries for effective work performance in Colleges of Education in Delta State as a result of designation. Therefore, the null hypothesis was upheld.

Table 7
Summary of Analysis of Variance (ANOVA) for Hypothesis Three

Source of Variance	Sum of Squares	Df	Mean of Squares	F-cal	F-crit	Decision
Between groups	51.30	2	25.65	2.63	2.99	Not
Within groups	1258.26	129	9.75			Significant
Total	**1309.56**					

As presented on Table 7, the F-calculated value of 2.63 is less than the F-critical value of 2.99 at 0.05 level of significance. This means that supervisors did not differ significantly in their mean ratings on the extent of internet application skills possessed by secretaries for effective work performance in Colleges of Education in Delta State based on qualification. Therefore, the hypothesis was upheld.

Table 8
Summary of Analysis of Variance (ANOVA) for Hypothesis Four

Source of Variance	Sum of Squares	Df	Mean of Squares	F-cal	F-crit	Decision

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Between Groups	31.52	2	15.76	2.18	2.99	Not
Within Groups	934.29	129	7.24			Significant
Total	**965.81**					

Table 8 reveals that the F-calculated value of 2.18 is less than the F-critical value of 2.99 at 0.05 level of significance. This implies that supervisors did not differ significantly in their mean ratings on the extent of power-point presentation skills possessed by secretaries for effective work performance in Colleges of Education in Delta State based on qualification. Therefore, the hypothesis was upheld.

Discussion of Results

The result of the analysis in respect of research question one as presented in Table 1 showed that supervisors rated word processing skills as being moderately possessed by secretaries in colleges of education in Delta State. This finding aligns with the research of Duniya (2011) who found that word processing skills are required of secretaries in the present electronic office. Similarly, Azuka (2007) posited that because of the significant improvement of the word processing application from the traditional typewriter that a secretary in this computer age is supposed to possess reasonably the word processing skills for effective office functions. Therefore, secretaries in colleges of education in Delta State should enhance their word processing skills to improve on their "moderate" expertise status.

Result of data analysis in respect of research question two revealed that supervisors rated electronic spreadsheet skills as being possessed at a moderate extent by secretaries in colleges of education in Delta State. This finding conforms to the result of Okoro (2013) who found that polytechnic Office Technology and Management lecturers in South-South Nigeria possess electronic spreadsheet application competency needed to teach their students the basic skills of the application. Also, Garba (2012) revealed that business educators are competent in the use of spreadsheet application in teaching their students. These separate researches show the importance of electronic spreadsheet application skills, not only to the lecturers who teach the secretarial students but particularly for the graduates (secretaries) to enable them perform optimally in the computer driven offices. It is imperative for these secretaries to upgrade their electronic spreadsheet skills especially ability to create formula to carryout arithmetic computation.

The result of the analysis with regard to research question three showed that supervisors rated internet application skills as being moderately possessed by secretaries in colleges of education in Delta State. This finding is in consonant with the result of Okolocha and Olanye (2015) which showed that secretaries in government ministries in Delta State fairly possessed internet application skills. Again, the finding is related to the study of Okeke and Ezenwafor (2012) which found

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that business education lecturers in Nigerian South-East universities fairly possessed internet operation competencies. Similarly, the finding is in accord with the result of the study conducted by Ohakwe (2008) that internet networking skills are needed by National Diploma Secretarial studies graduates. Egbri (2012) held that business education teachers are familiar with internet facilities but that they are not adequately exposed to using internet resources. Skills to carryout internet operations are very necessary for secretaries to possess. These skills will enable them to operate all the functions of the e-mail, facebook, twitter, google services and other internet applications.

The result of research question four indicated that supervisors rated power-point presentation skills as being moderately possessed by secretaries in colleges of education in Delta State. This means that the extent to which secretaries in colleges of education in Delta State possess power-point presentation skills was not adequate especially the ability to add sounds and animation in a presentation as well as running a slide show. This finding is in conformity with Okolocha and Olanye (2015) who found that secretaries in government ministries in Delta State, Nigeria possessed power-point presentation competencies. Onyesom (2014) in stressing the usefulness of the power-point presentation, pointed out that it is gradually becoming a common feature of classrooms, conferences, seminars, workshops, project defenses and proposals, staff training programmes, board meetings and even church services. Onyesom maintained that power-point is a worthwhile technology that tends to motivate audience and enhance their retentive and imaginative capacity. Therefore, secretaries need power-point presentation skills to be effective office personnel.

The results obtained from the test of hypotheses showed that all the four hypotheses tested were upheld. This means that the Deans, Directors and HODs (supervisors) in colleges of education in Delta State did not differ significantly in their responses on the extent their secretaries possess word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills. The supervisors held various academic qualifications (such as B.Sc/HND, M.Sc and Ph.D) and designations (such as deans, directors and heads of departments/units). Irrespective of these demographic differences among the supervisors, their ratings on the extent their secretaries possess the various computer skills examined were not significantly different. Hence, the four null hypotheses were upheld.

Conclusion

In light of the findings of this study, it was concluded that secretaries in colleges of education in Delta State moderately possessed word processing skills, electronic spreadsheet skills, internet application skills and power-point presentation skills. However, the moderate possession of computer skills by the secretaries may be limiting their effectiveness and efficiency in the present computer driven offices.

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Recommendations

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

1. Authorities of colleges of education in Delta State should extend TETFUND sponsorship to secretarial staff to enable them attend computer and technology training workshops, seminars and conferences for purpose of enhancing their technological skills.
2. Authorities of colleges of education in Delta State should regularly organize retraining programme for secretaries in the usage of the computer applications.
3. Authorities of colleges of education in Delta State should partner with national and international ICT training firms like Afrihub, NIIT to grant secretaries access to computer training.
4. Secretaries in colleges of education in Delta State should regularly make personal efforts to update their computer skills in line with technological trends.

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