Full Length Research Paper

Relationship between the utilization of internet based information by secretarial teachers in the Nigerian Colleges of Education and the effectiveness of their lesson delivery

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This study assessed the relationship between the utilization of internet based information by secretarial teachers in the Nigerian Colleges of Education and the effectiveness of their lesson delivery. 250 secretarial teachers drawn from 58 accredited Nigerian Colleges of Education responded to the questionnaire that was divided into 4 parts. The questionnaire was used to obtain information on the respondents' bio-data and computer use background, Teacher Information Technology Skill Acquisition Competence (TITSC), Teacher Information Technology Skills Usage (TITSU), Teacher Information Technology Internet Knowledge (TITIK), and the extent of usage of internet information to teach the secretarial courses. Data were analyzed using descriptive statistics and Pearson Product Moment Correlation Coefficient. The null hypothesis tested significant at 0.01 level of significance. The result of the study showed lack of some basic learning experiences that are needed to adequately equip these teachers with ability to download and upload quality information. Owing to the lack of these IT skills therefore, the teachers were not able to access internet and use some IT facilities to move the frontiers of classroom lesson delivery to an enviable greater height. There was, although, a significant relationship between the IT skills of Secretarial Teachers and their awareness to use internet for lesson delivery, and their ability to use the internet to access information for lesson delivery, though the strength of these relationships were not strong enough. It was discovered that Secretarial teachers in the Nigerian Colleges of Education do not access Internet to obtain information to teach the courses available under the programme except office practice. The reason is because the requisite IT skills that will enable the secretarial teachers to search extensively for learning materials to teach effectively other courses with internet based information, outside office practice were lacking. It was therefore recommended that, the Ministries of Education should seek more collaboration with Education Trust Fund (ETF) to enable them develop integrated broad based model or strategy for applied Information Technology to secretarial education with a definite timeline for completion.

Key words: Information Technology (IT) skills, internet utilization, lecture delivery

INTRODUCTION

Information and Communication Technology has become a global phenomenon. As important as this is, the secretarial education teachers have acquired Information Technology skills, but have not been able to use such skills in accessing information from the Internet for effective teaching in their classrooms. The effect of the

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inability of secretarial teachers to provide for their students recent and varied internet resources and the capacity of the Secretarial Teachers as those charged with the responsibility of transmitting quality knowledge to students require investigation.

Secretarial teachers should be able to build their Information Technology capacity and be effective. ICDL Africa (2009) admitted that the majority of the teachers and students in Nigeria remained largely unexposed to the new technology up till today and there is a lack of well defined programme for Information Technology development or upgrading. More importantly there is a lack of widely accepted standards by which skills and qualifications in the new and rapidly changing field of Information Technology can be measured. Leverpool (2002) also agreed by observing that Information Technology invasion into the educational system particularly in Africa has been particularly slow. Leverpool (2002) also posited that, Information Technology represents an opportunity to those who can respond to the new paradigm and a threat to those who cannot. Suffice it to say that, a teacher without Information Technology skills and the ability to use it may not be relevant in the modern teaching industry.

The net effect of not using the internet to teach secretarial studies, as observed in this study is that, the quality of output of secretarial education teachers will be of low standard and this has implications for the secretarial profession and national development. The quality of the secretarial education graduates would be low, because of inability of the secretarial teachers to use the internet facilities hence, affecting secretarial profession, as employers would have no confidence in these types of graduates. They would be seen as incompetent hence the job opportunities would be lost, which ultimately would make Nigeria as a nation to suffer. Afemikhe (2004) stated that good teachers would beget good students from which the system can get a replenishment of its teaching stock. In the same vein, poor teachers will beget poor students and resultant effect will be poorer future teachers.

Teachers can only pass on skills and ideas to the learners if they acquire the relevant job experience of their trade, and they are at the centre of transmitting such knowledge and strive for developments in their disciplines. Olakulehin (2007) expressed an unfortunate situation in Nigeria where most teachers had minimal or no skills in Information Technology, hence this generation cannot survive the challenges postulated by the contemporary social realities with this level of ignorance, technophobia and information paranoia of the teaching force. Effective utilization of Information Technology skills by the secretarial teachers secures relevant information that would broaden the horizon of students and enlarge the frontiers of knowledge. It also enables the products enter into the electronic secretarial profession and advance in it with little or no supervision, and ultimately get them to compete well with their contemporaries globally.

OBJECTIVE OF THE STUDY

To assess the relationship between the utilization of internet based information by secretarial teachers in the Nigerian Colleges of Education and the effectiveness of their lesson delivery.

RESEARCH QUESTION

To what extent is the relationship between the utilization of internet based information obtained by secretarial teachers in the Nigerian Colleges of Education, and the effectiveness of their lesson delivery?

RESEARCH HYPOTHESIS

There is no significant relationship between the utilization of internet based information by secretarial teachers in the Colleges of Education in Nigeria and the effectiveness of their lesson delivery.

METHODS

The study used survey design with 250 secretarial (business education) teachers drawn from 58 accredited Nigerian Colleges of Education. No sampling was done because of the small size of the target population. However, out of the 250 secretarial teachers, only 225 secretarial teachers responded to the questionnaire that was divided into 4 parts. Questionnaire was used to obtain information on the respondents' bio-data and computer use background, Teacher Information Technology Skill Acquisition Competence (TITSC), Teacher Information Technology Skills Usage (TITSU), Teacher Information Technology Internet Knowledge (TITIK), and The extent of usage of Internet information to teach the Secretarial courses. The items were scored using 4 point scale as follows: Adequately skilled = 4, skilled = 3, fairly skilled = 2, not skilled = 1; very well = 4, well = 3, fairly well = 2, not at all = 1, very knowledgeable = 4, knowledgeable = 3, fairly knowledgeable = 2, not knowledgeable = 1; very often = 4, often = 3, occasionally = 2, never = 1; very much = 4, much = 3, little = 2, not at all = 1. The STITB Instrument was validated through pilot study in Kaduna and Zaria Polytechnics using graduates of Secretarial Business Education and whose colleges also run similar secretarial programmes as in the Nigerian Colleges of Education. The reliability coefficient of 0.90 was obtained. The research instruments were administered by the researcher on 250 secretarial teachers with the assistance of 12 field assistants, however, only 225 participants returned the instrument duly completed.

RESULTS

Tables 1 through 13 showed the results. Data were analysed using simple percentage and Pearson Product Moment Correlation Coefficient (PPMCC).

Table 1. Percentage of respondents by educational qualifications

Qualification	Frequency	Percent
Bachelor Degree	57	25.3
Masters Degree	145	64.5
Doctorate Degree	9	4.0
Others	14	6.2
Total	225	100.0

Source: Field Survey, 2011

Table 2. Percentage of respondents by rank

Rank	Frequency	Percent
Chief Lecturer	15	6.7
Principal Lecturer	23	10.2
Senior Lecturer	54	24.0
Lecturer 1	26	11.5
Lecturer 2	31	13.8
Lecturer 3	33	14.7
Assistant Lecturer	38	16.9
No Rank indicated	5	2.2
Total	225	100.0

Source: Field Survey, 2011

Table 3. Percentage of respondents by years of teaching experience

Teaching Experience (in Years)	Frequency	Percent
1-3	28	12.5
4-6	41	18.2
7-10	45	20.0
11-15	31	13.8
Above 15	79	35.1
Not indicated	1	0.4
Total	225	100.0

Source: Field Survey, 2011

Table 4. Percentage of respondents by personal use of computer

Personal use of computer	Frequency	Percent
I have	217	96.4
I do not have	8	3.6
Total	225	100.0

Source: Field Survey, 2011

Table 5. Percentage of respondents by years of experience using computer

Years of experience In using computer	Frequency	Percent
1-3	58	25.8
4-6	58	25.8
Above 6	101	44.9
No year indicated	8	3.5
Total	225	100.0

Source: Field Survey, 2011

Table 6. Percentage of respondents by computer procurement

Source of computer procurement	Frequency	Percent
Employer	49	21.8
Personal	167	74.2
Not indicated	9	4.0
Total	225	100.0

Source: Field Survey, 2011

Background on use of computer

Personal use of computer – The responses of respondents by personal use of computer were presented in Table 4.
Number of years of experience in using computer – Responses of the respondents by number of years of experience using computer were presented in Table 5.
Computer procurement – The responses of the respondents by who procured computer for them were presented in Table 6.
Reasons for not using computer – The responses of respondents by reasons for not using computer were presented in Table 7.
Previous training in computer – Responses of respondents by previous training were presented in Table 8.
Computer accessibility – The responses of the respondents by computer accessibility were presented in Table 9.

Analyses of Bio Data

Educational qualifications of the respondents – The responses of the respondents by their educational qualifications were presented in Table 1.
Ranks of the respondents – The responses of the respondents by ranks were presented in Table 2.
Number of years of teaching experience – The responses of the respondents by number of years of teaching experience were presented in Table 3.

Table 7. Percentage of respondents by reasons for not using computer

Reason for Not Using Computer	Frequency	Percent
Do not have knowledge to use it	2	0.9
None available	6	2.7
Too expensive	5	2.2
No time	2	0.9
Others	1	0.4
No response	209	92.9
Total	225	100.0

Source: Field Survey, 2011

Table 8. Percentage of respondents by their previous computer training

Formal computer training	Frequency	Percent
Had previous training	189	84.0
No previous training	33	14.7
No response	3	1.3
Total	225	100.0

Source: Field Survey, 2011

Table 9. Percentage of respondents by computer accessibility

Computer accessibility	Frequency	Percent
Not accessible	7	3.1
Occasionally accessible	39	17.4
Restricted access	3	1.3
Freely accessible	173	76.9
No response	3	1.3
Total	225	100.0

Source: Field Survey, 2011

Number of hours using computer per week – The responses of respondents by number of hours they use computer per week were presented in Table 10.

Table 1 showed that the Colleges of Education in Nigeria were equipped with qualified post graduate teachers to teach the secretarial education. This will go a long way to offset any deficiency in curriculum, in textbooks and in equipment.

Table 2 revealed that the Colleges of Education in Nigeria were equipped with qualified teachers that were also well advanced in their teaching experiences as could be seen in their respective ranks. The Colleges of Education were not bottom heavy as there were 52.4% senior academics that can mentor the other 47.6% for

positive teaching learning processes.

Table 3 showed that the Colleges of Education in Nigeria were not only equipped with qualified teachers who had rose to become senior academics, but their years of teaching experience attested for them. These lecturers that have at least four years of teaching experience sum up to 87.1%, who by regulation had their appointments confirmed.

Table 4 showed that 8 teachers had no personal contact with computers while 217 had. This few must do something fast to acquaint themselves with Information and Communication Technology skills before they are declared redundant or unproductive staff.

Table 5 showed the years of experience in using computer by the secretarial teachers. The total of 217 respondents out of the 225 that had been using the computer for an upward of 1 year and above was considered to be adequate. This is because any consistent practical session given to using computer on a daily basis for an upward of one year should bring some degree of perfection.

Table 6 showed the ability of most of the secretarial teachers to procure computers for themselves which was very commendable. Out of this number, 49 had theirs procured for them by their employers, most probable on loan, which is also a good gesture towards promoting efficiency in teaching and learning, through the use of computer

Table 7 showed 16 teachers that could not use the computer and their reasons for not using one. 209 teachers did not respond because they were using computer. It is important to note that, whatever was the reason for not using a computer by any teacher in this IT compliant educational sector is no excuse, for such teachers will soon become obsolete in the teaching profession, because they cannot give effective teaching through the use of IT skills. There will be a replacement of those teachers that cannot perform for those who can offer the IT related teaching service.

Table 8 showed something very impressive on the part of these teachers. The result indicated that many of them that had no computer literacy made personal effort to acquire the skills. This effort supported or agreed with the recommendations of Ugwuanyi and Eze (2009), that, teachers are expected to make personal efforts to have their own personal computers and engage private teachers where possible. This will make them become useful in the IT compliant classroom, as they will be able to teach effectively, giving quality information obtained from the internet.

Table 9 revealed the respondents' computer accessibility. The result was commendable as they had access. It is important to note that there were some Colleges of Education that collaborated with computer sales depot and Information Technology service providers. This partly explained for the improved accessibility of teachers to computer. The learning of Information Technology skills

Table 10. Percentage of respondents by duration of using computer per week

Duration of using computer per week (in hours)	Frequency	Percent
1-3	121	53.8
4-6	63	28.0
7-11	19	8.4
Above 11	16	7.1
No response	6	2.7
Total	225	100.0

Source: Field Survey, 2011

Table 11. Correlation analysis of scores of information technology skills of secretarial teachers and their awareness to use internet as instructional delivery tool.

Variables	N	Mean	SD	r	Remark
IT skills (X)	225	2.60	0.65	0.54	Average positive relationship
Sec. teachers internet usage awareness (Y)	225	2.37	0.78		

Source: Field Survey, 2011

Table 12. Correlation analysis of scores of information technology **s**kills acquired by the secretarial teachers and their utilization of internet to access information.

Variables	N	Mean	SD	r	Remark
IT Skills (X)	225	2.60	0.65	0.59	Moderate Positive Relationship
Sec. teachers internet usage (Y)	225	2.59	0.76		

Source: Field Survey, 2011

will only be meaningful to the extent that equipment for teaching was available and functional.

Table 10 revealed a good number of hours per week using computer. This explained increase for mastery of the Information Technology skills. Practice brings about perfection. As the teachers perfect in their skill acquisition, the students are better for it, as the teacher can give what they have, and accessing information using the Internet also becomes easier, hence an improvement in their teaching.

In attempt to answer the research question formulated, Table 11 showed that the Pearson's Product Moment Correlation Coefficient (r) was 0.54. This revealed an average positive relationship between the scores in the Information Technology skills of secretarial teachers in the Nigerian Colleges of Education and the scores in their awareness to use the internet as instructional delivery tool. There is a relationship between the Information Technology skills of Secretarial Teachers in the Nigerian Colleges of Education and their awareness to use the internet as instructional delivery tool. The result shows that, as the IT skills increase, their awareness to use Internet as instructional delivery tool is also increasing. If these teachers are exposed to more IT training, their awareness to some other internet search engines that

can be used for instructional delivery will be greatly enhanced.

In an attempt to still answer the research question formulated for the study, Table 12 indicated that the Pearson's Product Moment Correlation Coefficient (r) was 0.59. This also revealed a moderate positive relationship between the scores in the Information Technology skills of secretarial teachers in the Nigerian Colleges of Education and their scores in ability to use the internet to access Information. There is therefore, a relationship between the Information Technology skills of secretarial teachers in the Nigerian Colleges of Education and their ability to use the internet to access Information. The result here shows that, as moderate as the quality of the IT skills the secretarial teachers have, that is how moderate also their ability to used the Internet for classroom delivery.

The relationship established here indicated that if the quality of classroom delivery must be improved and be made effective as required, teachers will need to be trained or retrained in relevant IT skills they do not possess to build their capacity in order to enable them to access all the internet search engines for quality information.

The data in Table 13 showed that the Pearson's

Table 13. Correlation analysis of scores of utilization of internet based information obtained by secretarial teachers and the use of it for teaching.

Variables	N	Mean	SD	r	Remark
Sec. teachers internet usage (X)	225	2.60	0.65	0.37	Poor Positive Relationship
Usage of internet information for lesson delivery (Y)	225	2.30	1.00		

Source: Field Survey, 2011

Table 14. Pearson Product Moment Correlation between information obtained by secretarial teachers from the internet and the utilization for teaching.

Variables	N	x̄	SD	DF	R	Decision
Sec. teachers' internet usage		2.59	0.76	189	0.370**	S
Use of internet for lessons.	225	2.29	0.99			

** Correlation is significant at 0.01 level (2 tailed)

Product Moment Correlation Coefficient (r) was 0.37. This revealed a poor positive relationship between the scores in the secretarial teachers' usage of internet to obtain information and their scores in the extent to which such information assisted them to teach secretarial courses. There is a relationship between the secretarial teachers' usage of Internet to obtain Information and the extent to which such information assisted them to teach secretarial courses.

The result shows that the IT skills the secretarial teachers possess were such that could help them get only related information or material that will help them teach *office practice*, that is the reason for which office practice enjoyed more Internet based information in its instructional delivery. The other courses that could not be taught with internet based information such as entrepreneurship, shorthand, typewriting, and other courses was all because the teacher is deficient of the IT skills needed to be able to launch into the internet for relevant material for effective lesson delivery.

To test the null hypothesis of the study, Table 14 indicated that the Pearson Product Moment Correlation Coefficient R was 0.370. Using Choudhury's (2009). Range, there is a weak positive correlation or relationship between the IT skills of secretarial teachers and the ability to use internet for lesson delivery. Hence the null hypothesis was rejected. The result here also showed that the correlation coefficient was positive for as the value of the mean score of the secretarial teachers usage of the Internet increases, so does the mean score of their using Internet for effective lesson delivery, though at a weak rate. The implication of this result is that, if the secretarial teachers were equipped with more of the skills of using the internet search engines to access information, then the more will they be enabled to obtain relevant information for all the components of the secretarial education programme, thus, promoting effective classroom teaching.

FINDINGS

The study revealed a poor assessment of the utilization of internet based information for lesson delivery. It was discovered that the secretarial teachers in the Nigerian Colleges of Education were able to use internet based information to teach only office practice, out of the 12 courses that were provided to be taught in the NCE Secretarial Education Programme (NCCE, 2002).

It was discovered that secretarial teachers in the Nigerian Colleges of Education do not access internet to obtain information to teach shorthand, typewriting, business law, computer appreciation, entrepreneurship, office management, business communication, secretarial duties, computer application, word processing and principles of management. The only course that enjoys information from the internet vis-à-vis lesson delivery is *office practice*. The reason is because the requisite IT skills that will enable the secretarial teachers to be able to search extensively for learning materials to teach effectively other courses with Internet based information, outside office practice were lacking.

DISCUSSION

The study revealed that, secretarial teachers possessed some degree of IT skills; nevertheless they were deficient in some very key requisite and important IT skill area thereby making it difficult for these secretarial teachers to get quality information from the internet that will support them in giving quality and effective instructional delivery. This in turn will produce competent self reliant products that will also become effective and productive in classroom delivery.

Ikelegbe (2007) supported this assertion that, education in Nigeria today cannot be relevant without effective preparation of new generation of pupils and students to

effectively acquire competencies in the use and operation of the new Information Technology (IT) in their professional practices. It is suffice to say therefore, that for these generations of students to acquire these competencies, the teachers must first possess the skills, as it is correct to say, that one cannot give what he does not possess. The teachers must possess the Information Technology skills and they are adequately being utilized before they can impart to the students. Acquisition of the skills is not enough but the utilization that is of great importance.

Information Technology as defined by Ikelegbe (2007) is all the modern systems for processing information and communication in data, text, image and voice. If the secretarial teacher should demonstrate professional qualities, it is imperative that they must, according to Omeje (2009) not only have the deep rooted knowledge and skills in those IT equipment and operations of automated office facilities… and must effectively teach skills in these areas to their students. Omeje reiterated further that a secretarial teacher should be able to teach effectively, for instance, IT skills relating to word processing, internet services and facilities, and spreadsheet operating system. Nwaokolo (2000) observed that these would make the secretarial teachers remain relevant in the teaching profession. Jegede (2009) maintained that even were teachers used all of these skills well, there will be need for these teacher to move away from this foundational IT knowledge to a higher level of processes that can be translated to a more efficient learning model for student. The secretarial teachers will therefore need to move away from this foundational IT knowledge to a higher level of processes that can be translated to a more efficient learning model for student.

The study showed the resultant effect of the deficiencies of the respondents in those required IT skills, as they could not also perform well in the use of all the internet search engines to access information for effective teaching. The introduction of Information Technology into the office has revolutionized every aspect of secretarial function. This is an information age and the secretary is at the centre of distribution and communication of information, therefore, specified IT skills have been judged by Jegede (2009), to be beneficial for educators. Internet has made the whole world a global village and it is very important that secretarial teachers improve, update and be adequately prepared to remedy these areas of deficiencies in order to teach very vital skills involved in internet application for information. Agomuo (2004) asserted that, today's business electronic tools include: e-mail, e-commerce, e-banking, and total office operations, and all these demand that the business teachers should be very knowledgeable and skilled in their uses and application to enable them impart the skills to business students. The findings here also agreed with Moore (2004) that in as much as there are a lot of

information on the internet, it is sometimes hard to find out what you are looking for if you do not know how to use the internet facilities. Unfortunately, the design of business secretarial education curriculum lies primarily with the category of people who themselves were minimally informed on internet concepts.

The observed phenomenon is a positive result that shows that the secretarial teachers could not effectively demonstrate skillfulness in IT by searching the internet to download or upload important information or learning materials useful for effective teaching. No teacher teaches what he/she does not know. Akume (2004) in agreement with this assertion therefore, said, that teachers of business (secretarial) subjects (ICT inclusive) require a lot of skills and competence if they must impart desired knowledge to the learners. Gbenedio (2007) and Ekpenyong (2002) in Omeje (2009) observed that, many business teachers who have been long in the service may find it difficult to update themselves, a teacher of business (secretarial) education needs to complete his/her preparation for his/her job and keep abreast of the changes in his profession through professional improvement activities.

The study also showed the consequence of the secretarial teachers' lack of knowledge of some internet components as it affected their ability to teach all the course offerings in secretarial studies with internet based materials, hence making their teaching delivery ineffective in the light of IT driven classroom. The need in the educational industry today is moving from "learning to use IT" to "Using IT to learn" (Bevarnage et al., 2005). Jegede (2009) posited that, ICT based instruction is at the core of teachers needs. This would therefore, involve training teachers to create lesson plans utilizing IT and to use educational software. The findings here agree with Marcel and Amos (2010), who suggested that, a major way to reform the delivery system of business (secretarial) education is through the acquisition of the appropriate basic IT skills by lecturers. They stated that, computers and multi-media projectors can aid effective classroom interaction by enabling the teachers to show the power-points in the lessons. To do this, the lecturer should possess basic IT skills.

CONCLUSION

It is important to note that, the internet is a very rich library that has vital information for every discipline, and so, for the teachers of secretarial education to think that only office practice could be taught using the internet services amount to a poor service delivery. Other courses in the secretarial programme are very important to the students. Service delivery in the secretarial education will not be holistic to achieve the common goal of preparing the learner to enter and advance in this secretarial occupation at a local and at international level. Consequently,

teacher will not be well armed with the tool of accessing the global market (internet) to obtain the relevant and vital information in the discipline. This will in turn compromise the quality of output of secretarial education which ultimately will affect national development.

It has also become imperative to note that, anyone that must be a proficient, versatile, current, effective and efficient teacher of office education in any Nigerian College of Education must be computer literate, highly skillful and innovative, and should demonstrate how to utilize and develop Information Technology in order to remain relevant in the modern day world of work. The resultant effect will be that the teachers in the training institutions will not be imbued with the skills and abilities of IT literacy and sensibilities, hence there will be no knowledge and attitude to transmit onto the learners that they come in contact with in the classrooms, and therefore, there will be a serious gap at the point of practice. Consequently, the collaboration of the government, non-governmental and international agencies to build the capacity of secretarial teachers on IT driven teacher education will be a total waste. Curriculum drawn for developing countries such as Nigeria to encourage them to utilize the IT skills to download useful information related to their subject matter for teaching in the classroom will also be a waste.

RECOMMENDATION

The Ministries of Education should seek more collaboration with Education Trust Fund (ETF) to enable them develop integrated broad based model or strategy for applied Information Technology to secretarial education with a definite timeline for completion.

The Ministries of Education should seek for more funds from donor agencies such as USAID, UNESCO and DFID to sponsor this expensive IT project of developing software and hardware for Computer Assisted Instructions (CAI), and Computer Assisted Learning (CAL) specially fitted for Secretarial Studies programme. The services of programme designers, computer and data software analysts would be required for these models. These wares are to be user friendly, internet compliant and well suited for secretarial education purposes, by this, no course of study in the programme will be neglectted, and this will affect positively the teaching of secretarial education in the Nigerian Colleges of Education.

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