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POSTGRADUATES STUDENTS' COMPUTER SKILLS AND THE USE OF ONLINE INFORMATION RESOURCES: FEDERAL UNIVERSITY OF PETROLEUM RESOURCES LIBRARY, EFFURUN

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Abstract
The study investigates postgraduate students' computer skills and the use of online information resources in Federal University of Petroleum Resources, Effurun (FUPRE). It specifically marks postgraduate students of FUPRE. The study adopted descriptive survey design and self-constructed questionnaire was utilized to solicit data. The findings revealed that, majority of the participants accepted that computer skills influence their use of online resources, basic computer skills are perquisite to effective use of online information resources and participants accepted that they can save, print and preview document, they can use Microsoft word very well, they can download/upload file, they can format floppy disks among others while some participants rejected the use of the following; the use of CorelDraw very well, online search skills and the use of Boolean techniques. The findings further shows that all the strategies revealed for enhancing the postgraduate students' computer skills and use of online information resources are accepted. The study recommended that students should be exposed to additional computer applications, including Corel Draw, internet search tactics, and the efficient use of Boolean concepts and students should not give up on any program that will help them enhance their computer software abilities since it will include the utilization of electronic information resources among others.
Keywords*:* Online information resources; Postgraduates; Computer skills; Specialize University.

Introduction

Postgraduate students pursue postgraduate degrees in order to advance their professional or educational position. Some postgraduate students pursue further degrees in order to meet career requirements. As a result, the attainment of higher degrees is required for their continuing existence and advancement on their jobs. For research purposes, postgraduate students prefer online information resources over

print versions because they are easier to use, faster to access, easier to search, and information can be stored and altered. Furthermore, the print materials publishing process makes it difficult to acquire extremely recent information in some subject areas since, in some situations, information included in the print materials is no longer current at the time it is released. The relevance of internet information resources for postgraduate study cannot be emphasized since they assist postgraduate researchers in expanding their literature reviews and discovering fresh advances in their subjects. Access to full text online documents has become ubiquitous thanks to improvements in Information, Communication, and Technology (ICT) and e-publishing (Sharma, 2009). It is impossible to deny that postgraduate students' computer abilities and usage of online information resources in university libraries is growing, and that they are visiting the library less frequently (Borego, 2010). According to Ajuwun (2003), some library users of online information resources lack the requisite computer abilities to access excellent information. Online information resources are important for teaching, learning, and research, according to Akintola and Olayinwola (2014), but students' lack of computer skills would likely prevent them from using them.

This is the nub of this study. In addition, there is dearth of empirical data on postgraduate's computer skills and the use of online information resources in university libraries. Ample that has been written centred largely on the whole gamut of electronic information resources. There seems to be a deficiency of any known study on postgraduate's computer skills and the use of online information resources. . It is in this context, that this study seeks to investigate postgraduate students' computer skills and the use of online information resources at Federal University of Petroleum Resources Effurun, Delta State

Objectives of the Study

The following objectives shall guide the study

1. Determine the level of postgraduates' computer skills
2. Examine the frequency of online information resources usage
3. Examine the influence of computer skills on the use of online information resources.
4. Determine strategies for enhancing the postgraduate computer skills and the use of online information resources.

Review of Related Literature

Basic computer skill is the ability of the users to operate and make use of the computer files, appropriately start up and shut down the computer, troubleshooting, navigate the operating system and perform basic function of file management. Also, users' needs some common computer skills include: Analytical, social media, graphic design, Microsoft office, spreadsheets, email communication and data visualization among others. Therefore, students' needs to enrol in education courses and practice what they learn to enhance their online information resources. Online information resources enable users to complete intensive academic work that necessitates complicated interactions with the many components of its resources. Students today are exposed to a high degree of digital technology, which encourages them to have a high level of confidence while searching for information online. As a result, they will be able to successfully use online resources if they have the ability and understanding of computer abilities. According to Adeogbo (2011), the usage of computers and online information resources is quickly becoming a crucial component among university students in many countries. The utilization of online information resources is influenced by the level of computer abilities among pupils. Furthermore, according

to Edesiri (2016), 98.5 percent of undergraduate students agreed that computer skills improve their usage of online information resources as well as their confidence in utilizing online information resources owing to their degree of computer abilities. It was also demonstrated that the participants can use Microsoft Excel 139. (69.5 percent). Because online information resource subscriptions are capital intensive institutions libraries and individuals may be unable to afford, maintain, and renew their subscriptions. The level of computer skills among the students has been found to influence the use of online information resources. Katz (2008) reiterated that the use of online information resources by undergraduates can be influenced by the level of computer skills they possess. A study by Adeniran (2013) shows that undergraduates made use of electronic resources mostly for research, assignment, current awareness, information acquisition, and e-mail and news acquisition. Similarly, Ozoemelem (2009) investigated use of electronic resources by postgraduate students and found out that electronic resources were highly used by postgraduate students. Also, Edem and Egbe (2016) assessed the availability and utilization of electronic resources by postgraduate students in a Nigerian University Library and established that 86.39% of the respondents used e-resources. It also showed that the resources often used were e-books (12.65%), e-journal (60.53%) and internet resources (23.37%), and their purpose of using the resources is for research work and completing assignment. Kwafoa, Anhwere and Manu (2019) opined that 230 (57.5%) of the respondents used the resources daily. No respondent indicated twice a week, 119 or 29.8% indicated once a week, 16 (4.0%) of the respondents indicated once a month, and 35 (8.7%) indicating not at all.

Bassi and Camble (2011) stated that different studies have identified how students acquire their search skills for the use of e-resources. Klatt (2001) opined that a majority of students obtained their knowledge by trial and error or with the help of fellow students. Similarly, Hussain and Saddiqa (2019) investigated hindrances faced by respondents while accessing electronic information resources. The result reveals that low speed of internet, inadequate IT infrastructure, energy crisis low speed and non-availability of internet facility, lack of workshops and instructions were the major problems identified by the participants of the survey. No wonder Abubakar and Adetimirin (2015) in their study of influence of computer literacy submitted that students sometimes lack both computer literacy and research skills and so do not find the best appropriate information; therefore, they are left to use whatever information they can find first and fast. Therefore, if the right perceptions about internet search tools; the right ICT skills and search strategies are deployed it will enhance the use and benefits of internet search tools among undergraduates. Mole and Edewor (2020) identified some strategies to increase postgraduate students' awareness and use of online information resources in university libraries, to include increased enlightenment on online journals by lecturers, library tours by postgraduate students to encourage use of online journals, provision of adequate computer systems in university libraries, increased bandwidth, use of inverter/solar panels, and Internet search skills training for postgraduate students. At a similar study, Sambo A.S. and Akanwa Pearl (2021) proposed several viewpoints to improve the link between students' computer hardware abilities and the usage of electronic information resources in university libraries in Nigeria's South-West. Students should not give up on any program that will improve their computer software skills because it is related to the use of electronic information resources, students should improve their computer hardware skills because it is related to the use of electronic information resources, and

students should include and teach Internet and ICT literacy to students in the university through orientation and workshops.

Methodology

The study adopted descriptive survey design. The population of the study comprised all the 493 postgraduate students in Federal Universities of Petroleum Resources, Effurun, Delta State (2020/2021 academic session). The population figure is obtained from the establishment unit of university studied. The instrument for data collection for this research was a self-constructed questionnaire titled: Postgraduates Computer Skills and the Use of Online Information Resources. (PCSUOIRQ). The researchers distributed the questionnaire with the help of co- librarians as research assistants. Three research assistants from the institutions helped to distribute and collect the instruments since they are familiar with the respondents. A period of 2 weeks was used for administration and collection of the instruments. Out of the 493 questionnaire that were distributed to the respondents, 397 was duly completed and found usable, which gives (80.5%) response rate. Results were analysed using Statistical Package for the Social Science (SPSS) and are presented in percentage, mean and standard deviation. For the responses, it was based on four (4)-point rating scale Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD). It was based on four (4)-point rating scale and a mid-point mean of 2.5 and above was used as positive response.

Data Analysis and Discussion

Table 1: Population of the Study

S/N	Statement	Number of Questionnaire Distributed	Number of Questionnaire Retrieved	Percentage %
1	Department of Chemistry	44	27	6.8%
2	Department of Earth Sciences	38	28	7%
3	Department of Environmental Management and Toxicology	130	96	24.1%
4	Department of Mathematics and Computer Science	61	48	12%
5	Department of Physics	20	18	4.5%
6	Department of Chemical Engineering	40	37	9.3%
7	Department of Electrical/ Electronic Engineering	50	39	9.8%
8	Department of Marine Engineering	25	22	5.5%
9	Department of Mechanical Engineering	50	47	11.8%
10	Department of Petroleum Engineering	35	35	8.8%
	Total	**493**	**397**	**99.6%**

Source: Establishment Units of the University under study

As revealed in Table 1 above a total number of 493 copies of questionnaire were distributed and 393(80.5%) copies retrieved and were found useful. The response rate (80.5%) is considered adequate for the study because of the standard acceptable response rate for the studies is 60% and above. This is in line with Osuala's (2005) view that a minimum of 60% response rate is adequate for a research study.

Research Question 1: What is the influence of computer skills on the use of online information resources?

Table 2: The influence of computer skills on the use of online information resources

Statement	Decision
Basic computer skills are prerequisite to effective use of online information resources	Accepted
Adequate computer training is required for effective use of online information resources	Accepted
Computer skills enhance my use of online information resources	Accepted
Ability to navigate files and directories is a basic requirement to use online resources	Rejected
Am confidence in using online information resources due to my level of computer skills	Accepted

Criterion Mean=2.50
Source: Field Data

Table 2 shows postgraduate students' unanimous response that computer skills influence their use of online resources. Majority of the participants ($\bar{X}$=3.70) accepted that basic computer skills are prerequisite to effective use of online information resources. While respondents with mean value of ($\bar{X}$=3.48) accepted that computer skills enhance their use of online information resources, confidence in using online information resources due to their level of computer skills, ($\bar{X}$=3.28) Therefore, ($\bar{X}$ =2.12) rejected that ability to navigate files and directories is a basic requirement to use online resources.

Research Question 2: What is the level of postgraduate's computer skills?
Table 3: Level of postgraduate's computer skills

S/N	Statement	S A	A	D	SD		$\bar{X}$	Decision
1	I can effectively use Boolean techniques	36	89	109	163	1.99		Rejected
2	I have good Internet navigation skills	71	98	188	40	2.50		Accepted
3	I can limit online search by fields	52	82	172	91	2.23		Rejected
4	I can effectively use the library OPAC to search for specific library materials	109	112	97	79	2.63		Accepted
5	I can search for online database	105	217	61	14	3.04		Accepted
6	I can download/upload files	298	99	0	0	3.75		Accepted
7	I can attach files	271	126	0	0	3.68		Accepted
8	I can use Microsoft word very well	314	83	0	0	3.79		Accepted
9	I can use Microsoft power point very well	101	296	0	0	3.25		Accepted

10	I can use Microsoft excel very well	131	203	63	0	3.17	Accepted
11	I can use coral draw very well	69	97	123	108	2.31	Rejected
12	I can format floppy disks	297	100	0	0	3.74	Accepted
13	I can use Microsoft access very well	98	201	72	26	2.93	Accepted
14	I can save, print, and preview documents	351	46	0	0	3.88	Accepted

Criterion Mean=2.50
Source: Field Data

Table 3 shows that majority of the respondents accepted that they can save, print and preview documents ($\bar{X}$=3.88) while, ($\bar{X}$=3.79) accepted that they can use Microsoft word very well, ($\bar{X}$=3.75) accepted that they can download/upload file, **(** $\bar{X}$=3.74) accepted that they can format floppy disks. Whereas ($\bar{X}$=3.68) accepted that they can attached files. Also, it was accepted that respondents can use Microsoft power point very well ($\bar{X}$=3.25) while, use Microsoft excel very well ($\bar{X}$=3.17) search for online database whereas **(**$\bar{X}$=3.04) use Microsoft access very well **(**$\bar{X}$ =2.93). It was further shown that **(**$\bar{X}$=2.63) accepted that they can effectively use the library OPAC to search for specific library materials, have good Internet navigation skills **(**$\bar{X}$=2.50. Meanwhile, **(**$\bar{X}$=2.31) rejected the use of Corel draw very well ($\bar{X}$ =2.23) rejected. I can limit online search by field and **(**$\bar{X}$=1.99) rejected I can effectively use Boolean techniques.

Research Question 3: What is the frequency of online information resources usage?

Table 4: Frequency of online information resources usage

S/N	Statement	Frequency	Percentage (%)
1	Daily	215	54.1%
2	Weekly	101	25.4%
3	Monthly	69	17.3%
4	Occasionally	7	1.7%
5	Not at all	5	1.2%
	Total	**397**	**99.7%**

Source: Field Data

Table 4 shows that majority of the respondents regularly make use of online resources. 215(54.1%) make use of online resources daily; 101(25.4%) use online resources weekly whereas 69(17.3 %) use online resources monthly. While 7(1.7%) occasionally and only 5(1.2%) not at all. Consequently, it could be deduced that the postgraduate students under study frequently make use of online resources.

Research Question 4: What are the strategies for enhancing the postgraduate's computer skills and the use of online information resources?

Table 5: Strategies for enhancing the postgraduate's computer skills and the use of online information resources.

S/N	Statement	S A	A	D	SD	$\bar{X}$	Decision
1	Library orientation for all postgraduate students	179	157	61	0	3.29	Accepted
2	Stable and strong Internet connectivity in university libraries	100	297	0	0	3.25	Accepted
3	Users education program on online resources to be initiated in university	179	157	61	0	3.29	Accepted
4	Distribution of library guides to postgraduate students	98	201	72	26	2.93	Accepted
5	Increase enlightenment on online resources by lecturers	314	83	0	0	3.79	Accepted
6	Increase funding of university library	271	126	0	0	3.68	Accepted
7	Trained library personnel to guide postgraduate students on how to access online resources	170	198	29	0	3.28	Accepted
8	Increase in bandwidth in university library, cyber cafes etc.	298	87	7	5	3.70	Accepted
9	Users friendly interface by online resources publishers	143	217	6	31	3.18	Accepted
10	Uninterrupted power supply in university library	191	206	0	0	3.48	Accepted
11	Internet search skills training for postgraduate students	101	296	0	0	3.25	Accepted
12	Ensures affordable Internet by relevant agencies and government	131	203	63	0	3.17	Accepted
13	Provision of adequate computer system in university library	71	98	188	40	2.50	Accepted

Source: Field Data

Table 5 shows that all the strategies mentioned for enhancing the postgraduate computer skills and the use of online information resources are acceptable since they beyond are above the criterion mean= 2.50. The overall criterion mean shows **(**$\bar{X}$ =3.79) increase enlightenment on online resources by lecturers; ($\bar{X}$ =3.70) increase

in bandwidth in university library; ($\bar{X}$ =3.68) increase funding of university library; ($\bar{X}$ =3.48) uninterrupted power supply in university library and training library personnel to guide postgraduate students on how to access online resources ($\bar{X}$ =3.28) among others.

Discussion of the Findings

The results of this study revealed that participants' computer skills influence their use of online resources; basic computer skills are required for effective use of online information resources; the majority agreed that computer skills improve their use of online information resources; and the participants also agreed that their level of computer skills gives them confidence in using online information resources. This is in accordance with Edesiri (2016), who agreed that their degree of computer abilities enhances their usage of online information resources as well as their confidence in utilizing online information resources. Katz (2008) restated that the use of online information resources by undergraduates can be influenced by the level of computer skills they possess. Research questions 4 shown that participants can save, print and preview documents, they can use Microsoft word very well, they can download/upload file, they can format floppy disks, they can attach files, they can use Microsoft excel very well, they can search for online database, they can use Microsoft access very well.

It was further reveals that they can effectively use the library Online Public Access Catalogue (OPAC) to search for specific library materials and they have good Internet navigation skills. Buttressing the findings of this research Edesiri (2016) opined that, the participants can effectively shut down a computer, use mouse right-click menu as well as save, print, and preview documents 200(100%); use Microsoft word 191(95.5%) and use search engines to locate desired online information 187(93.5%). Also, it was revealed that the participants can use Microsoft excel 139(69.5%). Whereas some participants were rejected the use of coral draw very well, online search by field and effectively use Boolean techniques were rejected by some participants. This may be as a result of ineffective searching strategy to navigate online information resources. Results further indicated majority of the respondents regularly make use of online resources effectively. This is in line with Kwafoa, Anhwere and Manu (2019) opined that 230 (57.5%) of the respondents used the resources daily. Similarly, Ozoemelem (2009) investigated use of electronic resources by postgraduate students and found out that electronic resources were highly used by postgraduate students.

The results also demonstrated strategies for improving postgraduate computer skills and the use of online resources, such as increasing bandwidth in university libraries, increasing funding for university libraries, ensuring uninterrupted power supply in university libraries, training library personnel to guide postgraduate students on how to access online resources, training postgraduate students in Internet search skills, and ensuring affordable Internet by relevant agencies and governments. This is in consonance with Mole and Edewor (2020), who revealed strategies to improve postgraduate students online journal such as increased enlightenment on online journals by lecturers, library tours by postgraduate students to encourage use of online journals, provision of adequate computer systems in university libraries, increased bandwidth, use of inverter/solar panels, and Internet search skills training for postgraduate students, among others.

Conclusion

The study investigated postgraduates' students' computer skills and the use of online information resources in Federal University of Petroleum Resources Library, Effurun. Moreover, majority of users are becoming increasingly contingent on these e-resources to extract desired information required. Whereas, some participants rejected the use of the Corel draw very well, online search skills and the use of Boolean techniques. Meanwhile, students should not give up on any program that will help them enhance their computer software abilities since it will include the utilization of electronic information resources.

Recommendations

1. Students should be exposed to additional computer applications, including CoralDraw, internet search tactics, and the efficient use of Boolean concepts.
2. Management should train students on how to navigate files and online search by field is a basic requirement to use online resources
3. Students should not give up on any program that will help them enhance their computer software abilities since it will improve the utilization of electronic information resources.

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