

Undergraduates' Computer Skills and the Use of Online Information Resources: A Case Study of Library and Information Science Students of Delta State University, Nigeria.

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Abstract

The geometrical growth of information resources on the internet in this 21st century have necessitate the need for computer literacy and online searching skills to enhance easy access to and use of academic materials among undergraduate students. The study adopted descriptive survey method. Questionnaire was used to collect data for the study, and descriptive statistical method was used in analyzing the data collected and simple random sampling techniques were used to select the sample size for the study. The findings revealed that 98.5% agreed that Computer skills enhances their use of online information resources as well as being confidence in using online information resources due to their level of computer skills respectively. The study also revealed that undergraduate students are computer literate. Also the findings revealed that majority of the participants frequently make use of online resources. The study recommends among others that there should be a conscious effort by the institution to improve the computer skills of its students since it affects their ability to use online resources.

Keywords: Computer skills, Online Information Resources, Library and Information Science.

INTRODUCTION

Online information resources provide services supporting users to perform intense academic work that requires complex interaction activities with the various components of its resources. The current generations of students are being faced by a high level of digital technology that motivates them to have a high level of confidence while searching for online information. Therefore, the ability and knowledge of computer skills will enable them use the online resources effectively. It was observed that undergraduate students are looking for a convenient, time saving and fast response as they move from physical collections to the digital library (Lukersiwicz, 2007). The increase use of computer and the level of online searching by students and academics alike is an important measure of technological development in an academic environment. Thus, the computer is an electronic device that accepts data, process data, store data and disseminates data as meaningful output. The American Heritage Science Dictionary (2002) further defines a computer as the machine that can be programmed to manipulate symbols. Online resources according to Adeogbo (2011) are computer networks that allow

access to vast amount of information and services. Network computers provide an unparalleled capacity to access and use wide range of information resources. In this 21st century, online information resources have received great attention as students able to access vast amount of information that will enhance their academic performance. University libraries enable students to access online information resources such as online catalogues, electronic journals, subscribed resources and other electronic content, thus supporting users' information seeking practices.

LITERATURE REVIEW

Tella, Tella, Ayeni and Omoba (2007) emphasised that online information has many functions and benefits that are capable of positively influencing the academic performance of both students and researchers in the university as well as other higher educational institutions. However, it is imperative that the students should be familiar with the use and exploitation of the resources for a quicker and more effective usage. Atiken (2007) asserted that for undergraduates to effectively make use of online resources to access diverse materials on their academic researches and other learning activities, they require good computer skills to function effectively. The importance of online information resources to undergraduate students cannot be over emphasized. Van Scoyoc and Cason (2006) reported that undergraduate students rely on the Internet rather than library resources for their research needs. Although undergraduate students are currently familiar with Internet use, they are not sufficiently fluent with information and communication technology, and are less fluent than their perception (Hilberg & Meiselwitz, 2008; Maughan, 2001).

According to Lowe and McCauley (2002), computer skills are literacy and abilities that will enable information resource users to meet personal, educational and labour market goods. The use of computer and online information resources has a growing presence in all levels of education and in all kinds of occupation. Awolaye, Siyanbola and Oladapo (2008), pointed out that for undergraduates to be successful in their course-work, they need a certain level of expertise in computer and they stated that undergraduates need computer skills such as word processing skills, programming skills and data management skills to be able to use online information resources. Tenopir (2003) grouped the skills needed by undergraduates for effective use of online resources into operational skills, strategic skills and informational skills. Operational skills included the use of mouse and keyboard, copying information into storage

devices such as flash drive or diskette and scanning of image, access of online database. Strategic skills involve the use of search engine.

The report of the American Library Association (2009) indicates that to be able to use online resources, students must have the ability to evaluate and use effectively the needed information. National Research Council (2009) stated that the ability to set up personal computer using operating system features and connecting a computer to a network are important computer skills needed by undergraduates for effective utilization of online information resources. Okello and Ikoja-Odongo (2010) classified computer skills which are prerequisite for the usage of online information resources into the following categories; Basic micro computing skills: This includes understanding PC and its components, using command-oriented windows base, and LAN operating environments to accomplish basic tasks such as formatting floppy disks, creating and navigating through directory and sub-directing structures, creating and deleting files, copying and renaming files using available help screens when needed. Basic micro- computing spreadsheet skills: this involve the ability to create, organize and navigate through spreadsheets or a specific block of cells entering and editing formulas, values and text' copying, moving and protecting cells; inserting and deleting columns and rows, saving and retrieving files, and printing relevant materials.

Word Processing Skills: This involves the ability to load word processing software, creating, formatting, editing and saving documents; copying and moving text, adjusting margins, indents and the spacing, adjusting fonts and style, importation of tables and graphs from spreadsheet applications, using spell checking and using available help screens when needed Borrego, et al. (2007) observed that there have been many studies on the use of online information resources in the professional literature, in the last few years most of these literatures showed that the use of online information resources have been rapidly adopted in academic spheres. It is therefore necessary for the user to adapt their skills and practice in order to gain an awareness of technological advances.

Ajuwun (2003) observed that some online information resource users in the library lack necessary computer skills to obtain quality information. Akintola and Olayinwola (2014) observed that online information resources are beneficial for teaching, learning and research, but lack of computer skills would probably inhibit its use by students. Bristol (2014) opined that computer skills are needed by students to be able to retrieve information from online resources.

Becker (2003) reiterated that students acquire adequate computer skills to be able to use online information resources effectively.

Majid and Abazova (2009) asserted that online information resources cannot be effectively utilized by students if they cannot operate the computer. Adeogbo (2011) noted that the use of computer and online information resources is rapidly becoming a key component among university students in many parts of the world. 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. Basic computer skills are prerequisite to using online information resources. Ajayi and Adetayo (2005) in their study of the use of academic libraries discovered that majority of the users (students) do not have the basic computer skills and as such stay away from the use of online information resources.

Van Scoyoc and Cason (2006) reported that although undergraduates are currently aware of the importance of online information resources, they do not frequently use it as a result of lack of computer skills. McDowell (2002), indicated that university teachers do not teach students the needed skills to make use of information resources, this is because they believe that undergraduates should possess computer skills before being admitted into schools. Jansen and Pooch (2000) found that undergraduates have positive attitude with regard to the use of online information resources, but their computer knowledge and skills are not sufficient for effective usage of online information resources. McDonald (2004) noted that the current challenge for most universities is how to ensure that their students acquire the computer skills and competence needed for the use of information technology. Therefore, computer skills and competency is an important factor affecting student's capability to use the numerous online resources successfully. In a study of the relationship between computer skills and the usage of information resources, Majid and Abazova (2009) found a positive correlation between undergraduates computer skills and use of online information resources, the authors enunciated that undergraduates with good and excellent computer skills tend to use online information resources more than those with poor or without computer skills.

The study by Callinan (2005) further revealed that undergraduates had difficulty finding course related materials online because they lack the competency and skills of operating computer

system. Gross and Latham (2009) in their study stated that adequate computer skills, gives users the ability to:

- Determine the extent of information needed.
- Access the needed information effectively.
- Evaluate information and its sources critically.
- Incorporate selected information into one's knowledge base.
- Use information obtained effectively to accomplish a specific purpose.
- Understand the economic, legal and social issues surrounding the use of information.
- Access and use information ethically and legally.

Corroborating Jagboro (2003), Wikipedia (information literacy 2007) stated that adequate computer skills would enable the student to: Recognize that accurate and complete information is the basis for intelligent decision making, recognize the need for information, formulate questions based on information needs, identify potential sources of information, develop successful research strategies and evaluate information no matter what the source.

Statement of the Problem

The ability to use computer to search and retrieve online information effectively has become an essential skills useful for the undergraduate student's academic achievement and success in future life. Computer and online resources are key in this 21st century. In order to effectively use computer and online resources, it is necessary to examine students' computer skills and the use of online information. Therefore, this study investigated undergraduate students' computer skills and the use of online information resources.

Purpose of the study

The main purpose of the study was to investigate computer skills and the use of online information resources by library and information science students of Delta state university. Significantly the study was designed to;

1. Examine the influence of computer skills on the use of online information resources.
2. Determine the level of undergraduate students' computer skills.
3. Examine the frequency of online information resources usage.

METHODOLOGY

The study adopted the descriptive survey method to enable the researcher pose a series of questions to the respondents. The justification for the adoption of this design according to Pickard (2013) is that it describes the situation and/or look at the trends and patterns within the sample group that can be generalized to the defined population of the study. The instrument used to collect data for this study is the questionnaire. The questionnaire was titled: Questionnaire on undergraduates' computer skills and the use of online information resources (QUCSUOIR). It was divided into two sections. Section A is to elicit background information of respondents while section B was to elicit information on research questions formulated for this study.

PARTICIPANTS

The targeted population for this study is 983. This comprised all undergraduate students in the department of library and Information Science, Delta State University, Abraka. However, a total of 200 were randomly selected for this study. This comprised 50 students for each level of studies.

DATA ANALYSIS AND RESULTS

Analysis of Bio-data

Table 1: Distribution of Respondents by Gender

| GENDER | NO. OF PARTICIPANTS | PERCENTAGE % |
|--------|---------------------|--------------|
| Male | 83 | 41.5 |
| Female | 117 | 58.5 |
| Total | 200 | 100 |

Table 1 shows that 83(41.5%) participants are male, while 117(58.5%) are female. This shows that majority of the participants are female.

Analysis of Research questions

Research Question One: Does computer skills influence the use of online information resources among library and information science students of Delta State University?

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

| S/N | Items | Agree | Disagree |
|-----|---|--------------|-------------|
| 1 | Computer skills enhance my use of online information resources | 197 98.5% | 3 1.5% |
| 2 | Basic computer skills are prerequisite to effective use of online information resources | 195 97.5% | 5 2.5% |
| 3 | Am confidence in using online information resources due to my level of computer skills | 197 98.5% | 3 1.5% |
| 4 | Ability to navigate files and directories is a basic requirement to use online resources. | 127 63.5% | 73 36.5% |
| 5 | Adequate computer training is required for effective use of online information resources | 183 91.5% | 17 8.5% |

Table 2 shows that there is a consensus among the participants that computer skills influence their use of online resources. Majority of the participants 197(98.5%) agreed that Computer skills enhances their use of online information resources as well as being confidence in using online information resources due to their level of computer skills respectively. While 195 (97.5%) of the participant also agreed that basic computer skills are prerequisites to effective use of online information resources. This findings support Demiralay and Karadeniz (2010) study when it was observed that students' ability to interact with computers and other technological devices influences their level of online information literacy.

Research Question Two: What is the level of Undergraduate Students' Computer Skill?

Table 3: Level of computer literacy skill

| S/N | ITEMS | AGREE | DISAGREE |
|-----|--|-----------|-----------|
| 1 | I can use Microsoft word very well | 191 95.5% | 9 4.5% |
| 2 | I can use Microsoft power point very well | 67 33.5% | 133 66.5% |
| 3 | I can use Microsoft excel very well | 139 69.5% | 61 30.5% |
| 4 | I can use coral draw very well | 101 50.5% | 99 49.5% |
| 5 | I can format floppy disks | 100 50% | 100 50% |
| 6 | I can use search engines to locate desired information | 187 93.5% | 13 6.5% |
| 7 | I can shut down a computer appropriately | 200 100% | 0 00% |
| 8 | I can use mouse right-click menu function | 200 100% | 0 00% |
| 9 | I can save, print, and preview documents | 200 100% | 0 00% |

| | | | |
|----|--------------------------------------|-----------|----------|
| 10 | I can use Microsoft access very well | 133 66.5% | 67 33.5% |
|----|--------------------------------------|-----------|----------|

Table 3 shows clearly 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%). However, the use of Microsoft power point recorded a lower level of skills by the participants, 133(66.5%) disagreed to their ability to use Microsoft power point. This finding disagrees with a study by Ogbuiyi et al (2014) on the influence of computer literacy skill and online searching on undergraduates' use of academic materials in Babcock University Library. They reported 71(74.7%) of students under study being able to use Microsoft power point. The differential could be as a result of private University students being more exposed to computers than their counterparts in public Universities.

Research Question Three: How often do undergraduate students use online resources?

Table 4: Frequency of online information resources usage

| S/N | ITEMS | Frequency | Percentage |
|-----|--------------|-----------|------------|
| 1 | Daily | 91 | 45.5% |
| 2 | Weekly | 73 | 36.5% |
| 3 | Monthly | 25 | 12.5% |
| 4 | Occasionally | 11 | 5.5% |

Table 4 shows that majority of the participants frequently make use of online resources. 91(45.5%) make use of online resources daily; 73(36.5%) use online resources weekly; and 25(12.5 %) use online resources monthly. While only 11(5.5%) occasionally use online resources. Therefore, it could be interpreted that the undergraduate students under study frequently make use of online resources. The confirmed a study by Udende and Azeez (2010) on 'Internet access and use among students of the University of Ilorin, Nigeria'. The study revealed that 100 (26%) respondents used it daily, 178(46.2%) used the internet on weekly basis, while 107(27.8) used the facility ones in a while.

Conclusion

The tremendous change that has evolved in the world of information characterized by the shift from printed information resources to online information resources has necessitated students acquiring the needed skills to access these online resources. The importance of online information in an academic environment cannot be overemphasized. Online information resources facilitate students' access to relevant and current information for learning and research development. This study therefore, focuses on students' computer skills and the use of online information resources since the computer is the most important medium to access online information resources. This paper has examined the influence of students' computer skills in the use of online information resources as well as the level of students' computer skills.

Recommendations

1. There should be a conscious effort by the institutions to improve the computer skills of its students since it affects their ability to use online resources.
2. The students should be more expose to computer especially Microsoft power point and Microsoft excel.
3. Students should be more encouraged to use online information resources frequently to enhance their academic performance.

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