

Information Literacy Skills and Use of E-Resources by Final Year Students of Redeemer's University, Nigeria

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Abstract

This survey research investigated the effects of information literacy skills on the use of electronic resources by final year students of Redeemer's university. The study examined the different demographic variables of the students, their level of awareness of the availability of e-resources in their library, level of information literacy, their ability to evaluate located information as well as their experience with the use of the resources. The study population comprised of 250 final year students of Redeemer's university. A questionnaire was used as the instrument for data collection. A total of two hundred and fifty (250) questionnaires was administered to the final year students who visited the library at the time of data collection, and a total of one hundred and thirty were returned and found suitable for analysis. The data so collected were collated and analyzed through the use of simple percentage counts. The findings showed that the respondents' information literacy skills level was high and they used e-resources extensively for academic purposes. The findings also revealed that the students encountered a network problem while using the e-resources. The conclusion was drawn, and recommendations were given.

Keywords: Information Literacy Skills, Use of E-Resources, Undergraduate Students, Academic performance

Introduction

Redeemer's University library has over the years ceased the opportunity advanced by ICTs to complement its print resources with electronic information resources which are accessible to users via the internet irrespective of location and time. While a good number of these resources are free, others are acquired through subscription. Presently, the library makes provision for access to databases such as; Elton B. Stephens Company (EBSCOHost), Access to Global Online Research in Agriculture (AGORA), Health InterNetwork Access to Research Initiative (HINARI), Journal Storage (JSTOR), Online Access to Research in the Environment (OARE), BIOONE, BIOLINE, African Journals Online Library (AJOL), ALUKA, Royal Society of Chemistry, Plant Resources of Tropical Africa (PROTA), Open Access Journals, Library of Thomson Learning, E-books, CD-ROM and Bentham Journals. The University library is fully automated and equipped with the basic and necessary Information and Communication Technologies (ICTs) facilities to facilitate the provision of web-based information resources to students and staff of the university to support their research activities.

To effectively use the e-resources provided by any institution, those who are meant to utilize the resources should possess the required skills to explore the same. Literature has established that possession of information literacy skills is an important factor that determines the use of e-resources among students (Adeleke & Olorunsola, 2010; Robles & Braathen, 2002; Brown, 2000). Training is organized regularly for students to acquire the skills that are required to explore e-resources in education institutions. Training received by students among others include 1) training given by the university library 2) online instruction 3) individual instruction 4) training on special request. All these are meant to equip students to enable them to use the resources provided by their institution.

Statement of the Problem

Advances in ICT are encouraging libraries to acquire e-resources to add to their collections. These resources are meant to support students' coursework, assignment, paper writing, and research activities. As there is a constant explosion of electronic information resources so also are challenges of using these resources effectively and responsibly. In using e-resources, students require skills to be able to locate and evaluate

information. Lack of these skills impedes the effective use of the resources. This research, therefore, investigates the level of information literacy skills of the final year students of Redeemer's university and the effects of these skills on their use of e-resources.

Objectives of the Study

The general objective of this study is to investigate the effects of information literacy skills on the use of e-resources by final year students of Redeemer's University. The specific objectives are;

1. To determine the level of information literacy skills of final students of Redeemer's university
2. To ascertain the frequency of use of e-resources by final students of Redeemer's university
3. To identify the purpose of use of e-resources by final students of Redeemer's university
4. To determine the relationship between information literacy skills and e-resources use by final students of Redeemer's university

Research Questions

1. What is the level of information literacy skills of final students of Redeemer's university
2. What is the frequency of use of e-resources by final students of Redeemer's university
3. What is the purpose of use of e-resources by final students of Redeemer's university
4. What is the relationship between information literacy skills and e-resources use by final students of Redeemer's university

Literature Review

Advances in ICTs applications in educational institutions in the recent years has brought tremendous changes in the way information is being created, stored, retrieved, accessed and used. ICTs application in information has led to the introduction of several products and services in the information environment. Scholarly communications development is being highly influenced today through the internet and the web. The use of ICTs in the creation of and access to information has the potentials to deliver a vast amount of information in less time across geographical barriers unlike the traditional media of information delivery. This important fact now encourages university libraries to subscribe to e-resources to complement their print collection. The print media is increasingly giving way to the electronic form of materials as they have been found to be more useful in supporting the research activities of students. Varghese (2008) notes that the availability of information in electronic media has, as such, created opportunities for global access to information, enhanced the speed of service, increased the number of users served, increased the quality of information provided, and offered new and exciting opportunities for postgraduate students to find information related to their research areas. E-resources are veritable sources of information and thus provide a wide range of opportunities for students to access irrespective of place or time. Abubakar and Adetimirin (2015) asserted that e-resources have the potential for enhancing postgraduates' learning, as the resources provide postgraduates with vast quantities of information in an easily accessible non sequential format. The authors in further expression of the importance of e-resources stated that the function of e-resources in research and learning is rapidly becoming one of the most important and widely discussed issues in the education policy. Pandurangaswamy and Kishore (2013) opined that users do not have enough time to browse through the page of printed materials and this encourages users such as postgraduates to increase their use of e-resources for research, coursework, and teaching as it would help them to maximize their time. Lending credence to this view, Brown, Found & McConnell (2007) asserted that time saved on using e-resources has a very positive impact on postgraduates' ability to be creative. On the value of saved time using e-resources, Melo and Pires (2011) studied postgraduates usage of e-resources in academic libraries in Portugal and revealed that the average time saved for doctoral students amounted to 7.88 hours while the average time saved for master's students was 3.55 hours monthly. The acquisition of e-

resources in higher institution of learning is becoming increasingly justifiable due to their increased importance in the learning environment.

More important in the management of e-journals in university libraries is the effective use of the resources. Students need to possess the skills required to explore electronic resources. Adeleke and Olurunsola (2010) submitted that the ability to use library resources effectively is increasingly becoming recognized as an integral part of the undergraduate study and a great concern to library practitioners the world over. In recent years, there have been calls for changes in the education curriculum to improve the quality of education to sufficiently train students to adapt to the workplace (Robles & Braathen, 2002; Brown, 2000) especially with work that involves the use of computer technology. Umeji, Efe, and Lucky (2013) argued that literacy is fundamental to national development, and thus nations subscribe to global literacy development agendas so as to eliminate illiteracy which often affect social development. The authors stressed that individuals need to be adequately and functionally literate in order to be fully capable of living healthy, enjoying a long life, participating in the information is driven and the digital world. Information literacy helps to define a problem, find information to solve the problem. Issa, Amusa, and Daura (2009) in their paper on information literacy opined that locating electronic information online requires the ability to locate, manage, critically evaluate and use information for problem solving, research and decision making. The authors enumerated certain skills required for effective and efficient use of library resources to include; specific online searching skills, ability to select appropriate search terminology and construct a logical research strategy and to evaluate information appropriately. Helping students on how to learn, in other words, lifelong training learners are among the most important task of educational institutions. Kodani (2012) notes that the ability to locate information is necessary for quality research. A person must be able to recognize the need for information and have the ability to locate, evaluate and effectively use the needed information. Students should be able, after graduation to continue their creativity and reach higher levels of education by combining the new and old information set (Azin, Kolabi and Bigdeli (2009).

Information literacy encompasses knowledge of one's information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hands. UNESCO (2003) noted that information literacy is a prerequisite for participating effectively in the information society and as part of the basic right of lifelong learning. Information literacy skills are an essential component of a successful academic career (Oakleaf and Owen, 2010). Kodani (2012) notes that the lack of information search skills leads to delay and frustration in students' attempt to complete courses related works that require research. Information literacy skills are important particularly now that there is an increasing explosion of electronic information resources. Borah, Kuchida, Lee, Lippincott, and Nagaraj (2004) describe this as the "Access Paradox" where there is an increase in e-resources, but users are less able to find what they need due to lack of sufficient skills. Information literacy skills are required in all learning environments. Umeji et...al (2013) observed that information literacy is a tool which enables learners to master content and extends their investigations, becomes more self-directed and assumes greater control over their own learning.

Webber, Johnston, and Boon (2002) recognizes that definitions of information literacy vary but generally include the following knowledge and skills: effective information seeking; informed choice of information sources; information evaluation and selection; comfort in using a range of media to best advantage; awareness of issues to do with bias and reliability of information; and effectiveness in transmitting information to others. As observed by the Association of College and Research Libraries (Information Literacy Competency Standards, 2006) information literate individual is expected to possess some qualities. These include individual ability to: determine the extent of information needed, access the needed information effectively and efficiently evaluate information and its sources critically, incorporate selected information into one's knowledge base, use information effectively to accomplish a specific purpose, understand the economic, legal and social issues surrounding the use of information and access and use information ethically and legally. Lending credence to the Association of College and Research Libraries' observation, Wikipedia ("Information Literacy" 2007) states that an information literate person is one who:

- recognizes that accurate and complete information is the basis for intelligent decision making.
- recognizes the need for information
- knows how to locate needed information
- formulates questions based on information needs
- identifies potential sources of information
- develops successful search strategies
- accesses sources of information including computer based and other technologies
- evaluate information no matter what the source
- organizes information for practical application
- integrates new information into an existing body of knowledge
- uses information in critical thinking and problem solving
- uses information ethically and legally

Methodology

The survey research design was adopted for this study. The target population for the study comprised 250 final year students of Redeemer’s university, both male and female. The study included only the final students of the institution because they had spent a longer period in school and may have acquired more skills for the use of online resources than those in the lower levels. The information literacy scale developed by Kurbanoglu, Akkoyunlu, and Umaytotal (2004) was adopted to measure the level of the information literacy skills of the respondents. The questionnaire was administered to the final year students who visited the university library during the period of data collection. Two library staff assisted in the administration of the questionnaire. Out of the entire questionnaire that was administered, 130 copies were returned and found suitable for analysis. The data so collected were collated and analyzed (excluding missing items) through the use of frequency counts.

Data Presentation and Analysis

Table 1: Level of Information Literacy Skills

Variables	Strongly Agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)	Total (%)
Formulating questions based on information needs	33 (25.8%)	76 (59.4%)	17 (13.3%)	1 (0.8%)	1 (0.8%)	128 (100%)
Identifying potential sources of information	28 (22.0%)	81 (63.8%)	14 (11.0%)	3 (2.4%)	1 (0.8%)	127 (100%)
Developing successful search strategies	26 (20.6%)	72 (57.1%)	22 (17.5%)	4 (3.2%)	2 (1.6%)	126 (100%)
Accessing sources of information	34 (27%)	70 (55.6%)	16 (12.7%)	5 (4%)	1 (0.8%)	126 (100%)
Evaluating information sources	37 (29.1%)	71 (55.9%)	17 (13.4%)	2 (1.6%)	0 (0%)	127 (100%)
Organizing information for practical application	30 (23.4%)	69 (53.9%)	22 (17.2%)	5 (3.9%)	2 (1.6%)	128 (100%)
Integrating new information into an existing body of knowledge	31 (25%)	74 (59.7%)	16 (12.9%)	1 (0.8%)	2 (1.6%)	124 (100%)
Using information for critical thinking and problem solving	36 (28.1%)	68 (53.1%)	21 (16.4%)	2 (1.6%)	1 (0.8%)	128 (100%)

109 (85.2%) of the respondents agreed they could formulate questions based on information needs, 2 (1.6%) disagreed while 17 (13.3%) were undecided. 109 (85.2%) said they have the ability to identify potential sources of information, 4 (3.2%) disagreed while 14 (11.0%) were undecided. 98 (77.7%) agreed they could develop successful search strategies, 6 (4.8%) disagreed while 22 (17.5%) were undecided. 104 (82.6%) agreed they could access sources of information, 6 (4.8%) disagreed while 16 (12.7%) were undecided. 108 (85.0%) agreed they can evaluate information sources, 2 (1.6%) disagreed while 17 (13.4%) were undecided. 99 (77.3%) agreed they could organize information for the practical application, 7 (5.5%) disagreed while 22 (17.2%) were undecided. 105 (84.7%) said they could integrate new information into an existing body of knowledge, 3 (2.4%) disagreed and 16 (12.9%) were undecided. 104 (81.2%) agreed they can use information for critical thinking and problem solving, 3 (2.4%) disagreed while 21 (16.4%) were undecided. The analysis shows that the level of information literacy skills of the respondents is high. This corresponded with the respondents' high usage of the e-resources provided by the library.

Table 2: Proficiency level in Evaluation of information located

Variables	Excellent (%)	Good (%)	Fair (%)	Not Good (%)	Poor (%)	Total (%)
Read text and select main ideas	34 (26.4%)	68 (52.7%)	20 (15.5%)	6 (4.7%)	1 (0.8%)	129 (100%)
Compare information from various sources	37 (29.1%)	64 (50.4%)	22 (17.3%)	3 (2.4%)	1 (0.8%)	127 (100%)
Investigate various view points of the literature	27 (21.4%)	55 (43.7%)	37 (29.4%)	3 (2.4%)	4 (3.2%)	126 (100%)
Using information techniques for studying	35 (27.6%)	59 (46.5%)	22 (17.3%)	8 (6.3%)	3 (2.4%)	127 (100%)
Identifying verbatim information for later quoting	26 (20.8%)	50 (40%)	31 (24.8%)	9 (7.2%)	9 (7.2%)	125 (100%)

When the respondents were asked to indicate their level of proficiency in the evaluation of information located, a very high number of them indicated they were highly proficient in information evaluation. 102 (79.1%) showed a very high level of proficiency, 20 (15.5%) proficiency level was fair while 7 (5.5%) of them had a poor proficiency level. 101 (79.5%) had a high proficiency level in comparing information from various sources, 22 (17.3%) were fair while 4 (3.2%) had poor proficiency level. 82 (65.1%) respondents had a high proficiency level in investigating various viewpoints of the literature, 37 (29.4%) were fair, and 7 (5.6%) had poor proficiency. In using information techniques for studying, 94 (74.1%) showed high proficiency level, 22 (17.3%) were fair, and 11 (8.7%) were poor. 76 (60.8%) had high proficiency in identifying verbatim information for later quoting, 31 (24.8%) were fair while 18 (14.4%) had poor proficiency level. From the analysis, a high number of the respondents had the ability to evaluate information for effective or appropriate use.

Table 3: Frequency of E-resources Use

Variables	Regularly (%)	Occasionally (%)	Seldom (%)	Never (%)	Total (%)
E-journals	89 (71.2%)	18 (14.4%)	6 (4.8%)	12 (9.6%)	125 (100%)
E-books	86 (71.1%)	22 (18.2%)	17 (14.0%)	6 (5.0%)	121 (100%)
E-newspaper	97 (80.2%)	17 (14.0%)	3 (2.5%)	1 (0.8%)	121 (100%)
E-thesis	101 (82.1%)	16 (18.0%)	3 (2.5%)	3 (2.5%)	123 (100%)
CD-ROM	83 (66.4%)	22 (17.6%)	8 (6.4%)	12 (9.6%)	124 (100%)

From the table above, a majority of the respondents used e-journals regularly. 89 (71.2%) of the respondents used e-journals regularly. 18 (14.4%) respondents used e-journals occasionally, 6 (4.8%) seldom used e-journals while 12 (9.6%) never used e-journals. For e-books, 86 (71.1%) of the respondents agreed they used e-books regularly, 22 (18.2%) occasionally used e-books, 17 (14.0%) of the respondents seldom used e-books while 6 (5.0%) never used e-books. 97 (80.2%) reported that they used e-newspapers regularly, 17 (14.0%) of them used e-newspapers occasionally, 3 (2.5%) seldom used e-newspapers while only 1 (0.8%) of them never used e-newspapers. As for e-thesis, 101 (82.1%) of the respondents said they used e-thesis regularly, 16 (18.0%) of them used e-thesis occasionally, 3 (2.5%) seldom used e-thesis while 3 (2.5%) never used e-thesis. 83 (66.4%) of the respondents regularly use CD-ROM, 22 (17.6%) occasionally used CD-ROM, 8 (6.4%) seldom used CD-ROM, while 12 (9.6%) never used CD-ROM. This implies that the respondents regularly used the e-resources provided by the university library.

Table 4: Purpose of Use of Electronic Resources in Redeemer’s University Library

Purpose of Use	Strongly Agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)	Total (%)
Research	82 (61.0%)	4 (3.2%)	0 (0%)	8 (6.4%)	4(3.2%)	98 (100%)
Term paper writing	11(9.2%)	10 (8.2%)	2 (1.6%)	0 (0%)	1(0.8%)	24 (100%)
update my knowledge	8 (6.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	8 (100%)

On the purpose of use of e-resources in Redeemer’s University library, 86 (64.2%) respondents agreed they use e-resources for research, 12 (9.6%) of them disagreed. 21 (17.4%) respondents said they use e-resources for term paper writing while 8 (6.4%) said they use them for updating their knowledge

Table 5: Relationship between information literacy skills and e-resources use

Relationship	Strongly Agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)	Total (%)
The ability to recognize information needs increases my use of e-resources	26 (21.0%)	69 (55.6%)	21 (16.9%)	4 (3.2%)	4 (3.2%)	124 (100%)
The ability to identify potential sources of information increases my search of e-resources	58 (47.5%)	24 (19.7%)	21 (17.2%)	10 (8.2%)	9 (7.4%)	122 (100%)
The ability to develop successful search strategies motivates me to use e-resources	12 (9.9%)	39 (32.2%)	17 (14.0%)	38 (31.4%)	15 (12.4%)	121 (100%)
The ability to evaluate sources of information encourages me to use e-resources always	53 (44.2%)	32 (26.7%)	11 (9.2%)	11 (9.2%)	13 (10.8%)	120 (100%)
Information skills help users to organize information for practical application	21 (16.9%)	40 (32.3%)	22 (17.7%)	30 (24.2%)	11 (8.9%)	124 (100%)

This table represents the responses of the respondents on the relationship between information literacy skills and use of e-resources. From the analysis, a majority of the respondents agreed that information literacy skills have a positive influence on the use of e-resources while a few of them disagreed. 95 (76.6%) of the respondents agreed that the ability to recognize information needs increases the use of e-resources, 8 (6.4%) disagreed while 21 (16.9%) were undecided. 82 (67.2%) of the respondents agreed that ability to identify potential sources of information increases the search of e-resources, 19 (15.6%) of them disagreed while 21 (17.2%) were undecided. 51 (43.1%) of the respondents agreed that the ability to develop successful search

strategies motivates users to use e-resources, 53 (43.8%) disagreed while 17 (14.0%) were undecided. 85 (77.2%) agreed that the ability to evaluate sources of information encourages the use of e-resources always, 24 (20.0%) disagreed while 11 (9.2%) were undecided. 61 (49.2%) of the respondents agreed that information skills help users to organize information for the practical application, 41 (33.1%) disagreed while 22 (17.7%) were undecided. This analysis clearly indicated that information literacy skills are determinants of e-resources use among students.

Discussion of Findings

The study focused on the effects of information literacy skills on the use of e-resources by final year students of Redeemer's University. The findings of the study revealed that a majority of the respondents possessed information literacy skills and with that, they were able to use e-resources effectively. This finding agrees with the findings of (Azi, Kolabi & Bigdeli, 2009; Johnston & Boon, 2002). The result also showed that the proficiency level of the respondents in evaluating information located was high and as a result, they were able to use e-journals, e-books, e-newspaper, e-thesis, and CD-ROM regularly for research works, term paper writing and to update their knowledge. This corroborates the findings of (Umeji et...al, 2013; Varghese, 2008; & Abubakar & Adetimirin, 2015)

Conclusion

In recent years, university libraries have been making efforts to complement their print collections with electronic information resources. These resources support students' research work as well as other academic activities as they provide access to a wide range of information across the globe. To explore and maximally benefit from the array of electronic information resources, there is a need for students to have information literacy skills among others. It is imperative therefore that the management of Redeemer's university library put in place measures that can sustain the high level usage of e-resources in the institution library. Library professionals, as well as teaching staff, should be intrinsically and extrinsically motivated so that they can constantly impact students with lifelong learning skills that would continue to help them even after they left school.

Recommendations

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

1. Library professionals and teaching staff should constantly give students 'use of library' and online resources instructions.
2. Redeemers University management through the library should ensure the provision of access to full-text web-based information resources. Access to full-text is important to encourage the use of e-resources.
3. Internet speed and bandwidth should be increased to create fast access to web-based information resources. This is because high speed of internet is important to efficiently and effectively use of e-resources.
4. The interest of students should be stimulated to encourage them to use e-resources.
5. Regular user education, and Information Literacy training to educate students on how to search and exploit e-resources should be carried out regularly effectively
6. Wireless internet services should be made available to students to enhance access to e-resources anytime and anywhere within and outside Redeemer's University environment.

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