Online Information Searching and Evaluation Skills of Postgraduate Students of Library and Information Science in Michael Okpara University of Agriculture, Umudike

By

Ozioma Prudent OGBUAGU (CLN)[1]*
08063245915
ozimaco2010@gmail.com
Librarian II

Ositadinma Paul OSONDU[1]
08039770879
osondu.ositadinma@mouau.edu.ng,

Dr Joy C. ONYENACHI (CLN)[1]
08038787847
onyenachijoy@gmail.com
Associate Professor & Deputy University Librarian

and

Ezinne Nkechinyere EZENWA (CLN)[2]
08051604110
Gudone82@yahoo.com
Assistant Librarian

*Corresponding Author

1. **University Library, Michael Okpara University of Agriculture Umudike, Abia State, Nigeria.**
2. **Federal University of Technology Owerri, Imo State**

Abstract
Online resources are being added to supplement collections, replace printed (paper) items, or improve access. For print sources, quality control is sought through critical evaluation during the publication process. However, on the web, anyone with access to the Internet can publish. There is no overriding organisation or governing body ensuring the validity of web page content. A good deal of high-quality information on the web is certain, but there is also much that is of questionable quality. Therefore, the study which is titled Online Information Searching and Evaluation Skills of Postgraduate Students of Library and Information Science in Michael Okpara University of Agriculture, Umudike, an empirical study which is aimed at establishing the level of online information searching skills of postgraduate students in MOUAU, ascertaining how postgraduate students acquire online information searching and evaluation

skills and identify the challenges hindering postgraduate students from acquiring online information searching. The research design employed for the study is a descriptive survey. 24 postgraduate students of the College of Education MOUAU, formed the population of the study and all the 24 was drawn as sample for the study. The result of the data analysis was interpreted using frequency counts of percentages and mean score. This research work found out that postgraduate students in MOUAU possess moderate level of online information searching skills and they mostly acquire their online information searching and evaluation skills through self-practice and from friends or colleagues. Lack of integration of ICT in academic curriculum, material and human factors, inadequate ICT facilities, are some of the challenges hindering the acquisition of online information searching and evaluation skills. This research work recommends that Information Literacy should be made a pre-requisite course in Schools of Postgraduate studies in Nigeria and also the University management should ensure that there is ubiquitous network in the universities, as this would aid in delivering courses that are offered online.

Keywords: Postgraduate students, online information searching and evaluation skills

Introduction

Acquisition of online information searching and evaluation skills is indisputably a step in the right direction towards an effective utilization of online resources. To thrive in online environment without requisite skills on navigation of online platforms to access, evaluate and retrieve pertinent information is like driving a car without engine. There are so many information sources available online, it's important to know online resources that are reliable and how to cite them. Students benefit from using online information sources in a variety of ways, including finding material that they are interested in and getting the most up-to-date information. Information literacy is a set of skills that requires people to identify when they need information and to be able to find, analyse, and use that information effectively. Today students perceive the Internet as the main source of educational information.

According to Fraillon, Ainley, Schulz, Duckworth & Friedman (2020) only a small percentage of students were able to critically evaluate and use information when searching online. Postgraduate students, who are expected to possess a certain level of competence in academic and scholarly research, are no exception. The rapid development of digital technology and the constantly increasing number of online information sources have meant that students' skills related to information searching and evaluation are crucial for academic success.

Information literacy (IL), according to Mealey (2014), is a collection of skills that students need to identify, retrieve, assess, and use information to solve issues. It broadens students'

knowledge and develops their thinking, gives opportunities for self-direction and learning, and lays the groundwork for academic achievement. It is an essential factor for achieving a lifelong learning (Soleymani, 2014). Students enrol at universities and other higher learning institutions knowing very little or nothing about basic information search skills, computer related and other information skills in general.

Statement of Problem

It is worth noting that the information found in the print media is well organised and regulated, unlike the information available on the internet that is not regulated for quality or accuracy. Since anyone can publish anything they wish on the Web, it is often difficult to determine the authenticity of online information sources; therefore, it is particularly important for the individual online information user to evaluate the resource or information before using it. Postgraduate (PG) students are engaged with research and a lot of assignments with high expectation from their lecturers to come up with quality research papers and findings. It therefore becomes important for PG students to have sound knowledge and skills to search, evaluate and utilize information. Regrettably, based on the literature available, empirical investigation in the area of online searching and evaluation skills of postgraduate students in MOUAU is scarce. It is this gap that the current study intends to fill.

Objective of the Study

The purpose of this research is to give a summary of the online information searching and evaluation skills of MOUAU postgraduate library and information science students. As a result, the study's specific goal is to:

1. Establish the level of online information searching skills of postgraduate students in MOUAU.
2. Ascertain how postgraduate students, acquire online information searching and evaluation skills.
3. Identify the challenges hindering postgraduate students from acquiring online information searching and evaluation skills.

Research Questions

To achieve the objective of the study, the following questions should be answered:

1. What is the level of online information searching skills of postgraduate students in MOUAU?

2. How do postgraduate students acquire online information searching and evaluation skills?

3. What are the challenges that hinder postgraduate students from acquiring online information searching and evaluation skills?

Literature Review

Online information search differs from searching the library resources or the licensed databases within the scientific field. The resources in the library database have been described to make the search easier. In addition, they have passed a quality check, often conducted by experts. Online publishing, however, is open to everyone, which requires the user to be alert and critical when searching for information. Searching information on the Internet has become a common learning activity in university teaching in all subject domains. Students are often required to search information via the Internet in order to finish and turn in their homework or research projects. Sasireka, Balamurugan, Ganasekaran & Copalarkishnan (2011) discovered that students preferred digital materials to print ones in terms of access and use. This choice could be attributed to the additional benefits of digital materials, such as multi-format support and ease of access.

In terms of the amount of information available, the Internet, particularly the World Wide Web, has overtaken most libraries. The Web, on the other hand, has not yet eclipsed libraries in terms of the overall quality of material it provides. Print (paper) resources have traditionally constituted a large part of library collections. Several survey results indicate that large numbers of students use online information sources. Postgraduate students tend to use online information sources for their academic tasks more often than traditional paper-based resources. Hence, many students use the Internet to search for information resources that meet their needs.

The emergence of the internet has significantly influenced almost every field of life. This development opens new ways to deal with the academic work routine. As a twenty-first century skill, information searching and evaluation and problem-solving skills are important for promoting students' academic performance. As in the other fields, internet has also brought new but positive changes in LIS field and enhanced the quality of work. To access online information resources, a typical expertise is required which sometimes emerge as a hurdle to access and use

the digital resources (Kinley, Tjondronegoro & Partridge, 2010). Students use different information sources at different academic levels to fulfil their information needs. Chu & Law (2007) reported that the students at higher level did not have good searching skills. He explained that many students at PhD level did not have sufficient searching skills to get their information sources.

Students largely lack the competencies associated with information literacy, especially the skills associated with information evaluation (Saunders, 2012). Ross, Fosmire, Wertz, Cardella, & Purzer (2011) reported that documenting and citing resources are more confident for students than finding and evaluating information. Despite the frequent use of the World Wide Web (www). Several studies have shown that lack of information literacy is partly the cause of underutilization of existing information and communication technologies (ICTs) and information resources. Van Epps, A. S., Fosmire, M. J., Wertz, R. R, H., & Purzer, S. (2013) reported that students' abilities to locate, evaluate, and apply high quality information are terribly weak in order to solve the open-ended problems in their courses. In web searching process, students pay attention to surface markers, including currency, author, and type of language used, instead of evaluating sites for credibility and accuracy.

Since competent information users are empowered and equipped to become competitive in the global information era, acquiring suitable online information searching and assessment abilities among information users is a critical issue. Information consumers gain lifetime learning skills by looking for and evaluating information online. Studies have shown that online information searching and evaluation skills can be acquired from varied sources. Tariq (2018) reported in his study that postgraduate students acquired online information searching and evaluation skills from trial and error or self-improvement, library instruction programs, friends / other students, family members in the home, short courses / training workshops formal education (degree programs). Online information searching and evaluation skills acquisition has been fraught with many challenges which hinder the postgraduate student. Among the problems associated to acquisition of online information searching and evaluation skill according to Jordan (2003) is lack of integration of ICT in academic curriculum. It was believed that proper integration of ICT related courses in academic curriculum will equip students beforehand with relevant ICT skill. To Jordan (2003) attribute challenges to acquisition online information

searching and evaluation skill to material and human factors. They assert that inadequate ICT facilities, underutilization of the few available ICT facilities, inadequate ICT training and failure to the library to provide effective information literacy programmes for postgraduate students proved to be a threat to acquisition of ICT literacy skill.

In line with the challenges, Enakrire & Onyenania (2007) outline the following challenges as hampering students' access to electronic resources: financial constraints, lack of formal training on how to browse the internet, little or lack of knowledge of websites/ search engines in searching for information on the internet, slow speed of the students in typing, disinterestedness or lack of interest on the part of some of the students, lack of knowledge on how to use computers effectively, and lack of time in searching for information on the internet.

Research Method

The research design employed for the study is a descriptive survey. The study was carried out in Umudike, Abia state, Nigeria. The research involves postgraduate students of the university. 24 postgraduate students of the College of Education MOUAU formed the population of the study and all the 24 was drawn as sample for the study. These consist of all postgraduate students in the college of education MOUAU in the 2020/2021 academic session, this figure was obtained from the MOUAU School of Postgraduate Studies. The instrument for data collection is the structured questionnaire tagged "Online Information Searching and Evaluation Skills of Postgraduate Students" (OISESPS). The result of the data analysis was interpreted using frequency counts of percentages and mean score.

Data Presentation and Analysis

The results of this study were analysed using frequency counts, mean scores and presented in the table below and a Criterion Mean of 2.50 was used to ascertain the degree of acceptance of the items in the data collection instrument.

Level of online information searching skills of postgraduate students in MOUAU

Table 1: Mean response on the level of information searching skills of postgraduate students

S/N	Item Statement	HL	%	ML	%	LL	%	VLL	%	M	D
1	Skills to construct a logical search strategy	1	4.8	10	47.6	4	19.0	6	28.6	2.29	**R**
2	Knowledge and use of search engines	6	28.6	7	33.3	8	38.1	0	0	2.90	**A**
3	Using keyword phrases to search for information on the web	5	23.8	8	38.1	5	23.8	3	14.3	2.71	**A**
4	Using advance searching technique to search for information online	1	4.8	5	23.8	8	38.1	7	33.3	2.00	**R**
5	Downloading files from online Databases	8	38.1	11	52.4	1	4.8	1	4.8	3.24	**A**
6	Use Boolean Operators (AND, NOT, and OR etc.) to narrow down my research topics.	4	19.0	3	14.3	5	23.8	9	42.9	2.10	**R**
	Grand Mean									**2.54**	**A**

Key: HL= high level; ML= moderate level; LL= low level; VLL= very low level; M=mean; D= decision

The data on table 1 above which seeks to know the level of online information searching skills of postgraduate students in MOUAU, indicates that item statement 5, 3 and 2 with a mean score of 3.24, 2.71 and 2.90 respectively which was above the criterion mean of 2.50 is accepted by respondents as the level of online information searching skills of postgraduate students in MOUAU, while item statement 1, 4 and 6 with a mean score of 2.29, 2.10 and 2.00 respectively which is below the criterion mean score of 2.50 were not accepted by the respondents as the level of online information searching skills of postgraduate students in MOUAU. Therefore, research question 1 which has a total of 6 item statements scored a grand mean of 2.54, which is above the criterion mean score, and thus indicates a high acceptance of the item statements by majority of the respondents.

Postgraduate Students Online Information Searching and Evaluation Skills

Table 2: Mean response on how postgraduate students acquire online information searching and evaluation skills

S/N	Item Statement	SA	%	A	%	D	%	SD	%	M	D
1	Through self-practice	5	23.8	11	52.4	5	23.8	0	0	3.00	A
2	From friends or colleagues	4	19.0	6	28.6	10	47.6	1	4.8	2.62	A
3	From my studies	1	4.8	2	9.5	14	66.7	4	19.0	2.00	R
4	Through workshops, conferences and seminars	1	4.8	5	23.8	7	33.3	8	38.1	1.95	R
5	Under the guidance of a librarian	2	9.5	3	14.3	11	52.4	5	23.8	2.10	R
6	Through the information literacy programme of the library	1	4.8	7	33.3	5	23.8	8	38.1	2.05	R
	Grand Mean									**2.28**	**R**

Key: SA= strongly agree; A= agree; D= disagree; SL= strongly disagree; M=mean; D= decision

The table 2 above of the data analysis in respect of how postgraduate students in MOUAU acquire online information searching and evaluation skills show that respondents acquired their skill through self-practice and through friends or colleagues in item statement 1and 2 with a mean score of 3.00 and 2.62 respectively. The item statement 3, 4, 5 and 6 with a mean score of 2.00; 1.95; 2.10 and 2.05 respectively, indicates that respondents did not acquire their online information searching and evaluation skills from their studies; attending workshops, conferences and seminars; under the guidance of a librarian; and through the information literacy programme of the library. Therefore, the above 4 item statements which are below the criterion mean score of 2.50 were not accepted by the respondents as means of acquiring online information searching and evaluation skills. The 6 item statements in table 2 yielded a grand mean score of 2.28 which is below the 2.50 criterion mean set for the study, thus indicating a high rejection of the items by majority of the respondents.

Challenges that hinder postgraduate students from acquiring online information searching and evaluation skills

Table 3: Mean response on challenges that hinder postgraduate students from acquiring online information searching and evaluation skills

S/N	Item Statement	SA	%	A	%	D	%	SD	%	M	D
1	Too much academic workload	14	66.7	6	28.6	0	0	1	4.8	3.57	A
2	Lack of information literacy programme in school curriculum	2	9.5	17	81.0	1	4.8	1	4.8	2.95	A
3	Lack of personal interest	1	4.8	2	9.5	14	66.7	4	19.0	2.00	R
4	Poor internet connectivity on campus	12	57.1	7	33.3	1	4.8	1	4,8	3.43	A
5	No training facility available on campus	7	33.3	12	57.1	1	4.8	1	4.8	3.19	A
6	My department doesn't encourage the use of online resources	4	19.0	3	14.3	5	23.8	9	42.9	2.10	R
	Grand Mean									**2.87**	**A**

Key: SA= strongly agree; A= agree; D= disagree; SL= strongly disagree; M=mean; D= decision

The data on table 3 above which seeks to know the challenges hindering postgraduate students in MOUAU from acquiring online information searching and evaluation skills shows that item statement 1, 2, 4 and 5 with a mean score of 3.57, 2.95, 3.43 and 3.19 respectively indicates that too much academic workload; lack of information literacy programme in school curriculum; poor internet connection and lack of training facility on campus for the acquisition of online information searching and evaluation is accepted as challenges hindering postgraduate students from acquiring online information searching and evaluation skills. Whereas lack of personal interest and department not encouraging the use of online resources in item statement 3 and 6 with a mean score of 2.00 and 2.10 respectively which is below the criterion mean score of 2.50 were not accepted by the respondents as challenges that hinder postgraduate students from

acquiring online information searching and evaluation skills. A grand mean of 2.87 was achieved, indicating a high acceptance of the item statements by majority of the respondents.

Discussion of Findings

The study indicated that the postgraduate students have moderate online information searching skills as 3 of the items scored more than the 2.50 criterion mean. The remaining 3 items scored below the 2.50 criterion mean score in table 1. This shows that online information searching skills has become the foundation for learning in our contemporary environment of continuous technological change. Online information searching skills constitute a core requirement for postgraduate students in order to be grounded in the use of information especially for research purpose.

This finding agrees with Odede (2018) which show that majority of Postgraduate Library and Information Science Students of Nnamdi Azikiwe University, Awka, can browse online databases to locate pertinent information, locate information in multiple sources, and recognize different methods of accessing information resources. This further agrees with the study carried out by Omekwu, Eke & Agbo (2014) who found that very few students agreed to use Boolean Operators to narrow down their research topics.

Postgraduate students in MOUAU acquire online information searching and evaluation skills mostly from self-practice, and from friends and colleagues. The other avenues for acquiring online information searching and evaluation skills such as through workshops, conferences and seminars, the information literacy programme of the library, was not utilized by the postgraduate students. This shows that majority of the respondents acquired their skills through informal channels. This finding however disagrees with Omeluzor, Bamidele, Ukangwa, & Amadi (2013) who carried out research on information literacy skills among postgraduate students of Babcock University Nigeria, and found that most of the respondents had their skills through seminar, user education (library instruction), orientation, one-on-one discussion and tutorial.

The study also found that there are challenges that are hindering postgraduate students from acquiring online information searching and evaluation skills. These challenges are too much academic workload, lack of information literacy programme in school curriculum, poor internet connectivity on campus, and no training facility available on campus. The finding agrees

with Jordan (2003) who observed that lack of integration of information literacy programme in academic curriculum affect ICT literacy skill of students.

Conclusion

Knowledge is power as the saying goes, this is very true because it is what we know that determines what we can do or cannot do. Information is required in all facet of life. Online information sources are constantly changing in terms of its volume, the technical aspects of its storage and retrieval, and in the way it is communicated. The ability to search and evaluate information constitutes a core requirement for postgraduate students in order to be grounded in the use of information especially for research purpose. Knowledge therefore becomes power when we are able to acquire information and effectively utilize it to meet our needs.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

- University administration should ensure that there is a ubiquitous network in the universities, since this will aid in the delivery of online courses.
- Information literacy should be made a required course in Nigerian postgraduate institutions.
- Librarians and academics should work together to design and deliver effective information literacy programmes for postgraduate students.

References

Anunobi, C. & Udem, O. K. (2015). Information literacy competencies of library and information science postgraduate students in South East Nigeria universities: a focus on the knowledge and skill level. *Information and Knowledge Management* 5(2), 20-30.

Chu, S. K. W., & Law, N. (2007). Development of information search expertise: postgraduates' knowledge of searching skills. *Portal: Libraries and the Academy*, *7*(3), 295-316.

Enakrire, T. R. & Onyanania, O. G. (2007). 'Causes inhibiting the growth or development of the information transfer in Africa: a contextual treatment', *Library HI – Tech News*, 24(4), 20–28.

Fraillon, J., Ainley, J., Schulz, W., Duckworth, D., & Friedman, T. (2019b). Preparing for life in a digital World: IEA International Computer and Information Literacy Study International Rep.

Jordan, E. (2003). Cybrary skills in the tertiary environment: in-service education for Librarians from developing Countries. *Australian Library Journal*, 52 (1) Available online at: http://www.alia.org.all/publishing/ali/52.1/full.text/cybrary.skills.html.

Kinley, K., Tjondronegoro, D., & Partridge, H. (2010, November). Web searching interaction model based on user cognitive styles. In *Proceedings of the 22nd Conference of the Computer-Human Interaction Special Interest Group of Australia on Computer- Human Interaction* (340-343).

Mealey, E. A. (2014). Assessing the connection between information literacy instruction and undergraduate student success: An annotated bibliography.

Odede, I. (2018). Information literacy skills among library and information science postgraduate students of Nnamdi Azikiwe University, Awka, *Nigeria International Journal of Library Science* 2018, 7(2): 32-36.

Omekwu, C. O., Eke, H. N. & Agbo, J. A. (2014). Internet search strategies employed by library and information science students of university of Nigeria, For Research, *Library Philosophy and Practice* (e-journal), Paper 1194.

Omeluzor, S. U., Bamidele, I. A., Ukangwa, C. C., & Amadi, H. U. (2013). The relevance of a library in the 21st Century: Students perception. *International journal of library and information science*, *5*(6), 160-166.

Ross, M. C., Fosmire, M., Wertz, R. R, H., Cardella, M., & Purzer, S. (2011). Lifelong learning and information literacy skills and the first year engineering undergraduate: Report of a self-assessment. In *American Society for Engineering Education. American Society for Engineering Education.*

Sasireka, G., Balamurugan, S., Ganasekaran, D., & Gopalarkishnan, S. (2011). Use of e-resources in digital environment among engineering institutions in Tamil Nadu (India): An empirical study. *European Journal of Scientific Research*, 60(3): 326-333.

Saunders, L. (2012). Faculty perspectives on information literacy as a student learning outcome. *The Journal of Academic Librarianship*. 38(4): 226-236.

Soleymani, M. R. (2014). Investigating the relationship between information literacy and academic performance among students. *Journal of education and health promotion*, *3*.

Tariq, M., Rehman, S. U., Mahmood, K., & Mustafa, G. (2018). Online information searching skills of business students. P*akistan Journal of Information   Management   and Libraries*, *20*, 39-59.

Van Epps, A. S., Fosmire, M. J., Wertz, R. R, H., & Purzer, S. (2013). Measuring student's ability to find and use high quality information: Developing standardized assessments. in Professional Communication Conference (IPCC), IEEE International Professional Communication 2013 Conference. *IEEE.*