

**Digital Literacy Skills and Use of Electronic Information Resources by LIS
Undergraduates At Bayero University, Kano**

Mujidat Adeola BELLO

University Library, Fountain University, Osogbo, Nigeria,

bello.mujidat@fuo.edu.ng,

bellomujidatadeola@gmail.com.

ORCID: 0000-0002-4862-7924

Ganiyat Abiodun Hammed

Department of Library and Information Science,

Bayero University, Kano

Abstract

This study investigates the influence of digital literacy skills on Electronic Information Resources Usage of students of Library and Information Sciences Bayero University Kano. The population of the study comprises undergraduate LIS students totaling 554 students. A simple random sampling technique was used to select a sample size of 217 students. Data analysis utilized descriptive statistics, including frequency counts, and percentages, to summarize and interpret the findings. The analysis provided insights into the relationship between digital literacy skills and EIR usage among LIS students. Results revealed that most respondents consider the relevance of electronic information resources to their search topics as very important, always consider the currency of EIRs when evaluating, and a majority of respondents expressed confidence in assessing the accuracy of information within electronic resources. Overall, this study contributes to the understanding of the role of digital literacy in accessing and utilizing electronic information resources among LIS students, with implications for curriculum development and instructional practices in library and information science education.

Keywords: *Digital Literacy Skill, Electronic Information Resources, LIS Students, Bayero University.*

INTRODUCTION

In today's digital age, the ability to effectively navigate and utilize electronic information resources (EIR) has become increasingly crucial. As the field of library and information science (LIS) adapts to the evolving landscape of information access, it is imperative that LIS students be technologically savvy to be able to navigate and explore the arrays of information channels available at their disposal. Electronic Information Resources (EIR) gives room for flexibility and remote access to information regardless of location (Igbinovia & Odelami, 2022).

According to Al Bataineh et al (2021), EIRs are resources that require internet access, electronic devices, and data in electronic form. Electronic resources can be viewed as information resources that can be retrieved, stored and used electronically. These are in electronic formats such as the Internet, CD-ROM databases, e-books, e-journals, e-dictionaries, e-magazines, online databases, OPAC, pen drives and other computer-based electronic networks (Kalsoom, Jabeen & Munawar, 2021). EIRs are information resources that are accessible with the aid of a computer or

any electronic device that delivers a collection of data in the form of textbooks, journals or any other information resources, which has been published under a commercially available title to meet the information requirements of users (Igbinovia & Odelami, 2022). They're principally divided into online EIRs and offline EIRs. The online EIRs are available over the Internet while the offline EIRs don't require internet connectivity for access and appear in the form of Diskettes, CDROMs and other movable offline databases. Across both divides (online and offline) of EIRs, examples include electronic journals, electronic images, electronic books, electronic databases, electronic multimedia resources, websites and web runners, electronic correspondence, electronic reference materials like directories and encyclopedias,

Educational Resources Information Centre (ERIC) and Online Public Access Catalog (OPAC). Electronic information resources are characterized by the capacity to store and give vast amounts of information relevant to the academic and personal development of students. This is because they generally contain up-to-date information, easy- to- access and easy-to-use contents. EIRs are useful for the learning and research activities of students in the university (Owolabi and Okocha, 2016). Adedokun and Fawole (2018) submitted that electronic information resources (EIRs) are the bedrock of academic success as they provide accurate and timely information for better educational outcomes and aid in the retrieval of huge amounts of information for teaching, learning and research. Kalsoom, Jabeen & Munawar (2021) opined that electronic information resources (EIRs) are a great way to get recent and current information.

Uwandu (2022) opined that EIRs might give vast quantities of information, a variety of search possibilities, simple citations, simplicity of uploading and updating, ease of storage and distribution, search flexibility, minimize search time, take up minimum space, and simple to the library. EIRs can be simultaneously accessed by multiple users. Temboge and Diso (2022) noted that EIRs form one of many formats of information resources in the library. The content of these sources varies from bibliographic or factual to full text. In most academic libraries in Nigeria, electronic information resources have been incorporated into their collections, services and operations. Also, Sahabi, Ebunuwele & Aidenojie (2020) opined that EIRs provide access to information that might be restricted to users because of geographical locations and financial crunch.

Accessing electronic information resources requires several strategies by library users, such as author, subject, title, keyword search/phrases, date of publication, etc. However, Salman et al (2020) opined that successful search and retrieval of electronic information could be dependent on one's level of digital literacy skills. Despite the choices, opportunities and enhanced flexibility that electronic information resources provide through the use of the internet and web search engines for academic activity, students do not make adequate use of these great benefits. One major determinant for the usage of electronic information resources among undergraduate students is digital literacy skills. (Ogbekene, 2022). Adeoye and Adeoye (2017) emphasized that the composite skills required for the student to fit into a digital environment in achieving his/her academic pursuit is digital literacy skill. It is difficult if not impossible for undergraduate students to excel in tertiary institution without basic skills and knowledge of digital technology. Digital literacy skills encompass a range of abilities that enable individuals to effectively locate, evaluate, and utilize electronic information resources. In the context of LIS education, where future professionals are being trained to serve as information intermediaries, the importance of such skills

cannot be overstated. Given the foregoing, this study seeks to examine the influence of digital literacy skills on electronic information resources usage by LIS students at Bayero University, Kano.

Statement of the Problem

Electronic information resources have indeed become very important to students in accessing recent information at the right time and in the right form. Students have access to quality information and opportunities for searching several databases. Despite the high necessity of electronic information resource usage, it has been observed that electronic information resources are grossly underutilized and that there are challenges which undergraduates may encounter in their use of EIRs. These challenges may be due to a lack of digital literacy skills (Ukwoma, Iwundu and Iwundu (2016). Also, underutilization of EIRs might be due to complexities associated with some electronic resources, as undergraduates who do not possess digital literacy skills may find use of EIRs difficult.

Objectives of the Study

The main objective of the study is to examine digital literacy skills and use of electronic information resources (EIR) by Library and Information Science (LIS) students at Bayero University, Kano. Other specific objectives are;

1. find out the ability of LIS students to find EIR;
2. find out the ability of LIS students to utilize EIR;
3. find out the ability of LIS students to share EIR;
4. find out the ability of LIS students to evaluate EIR;
5. find out the relevance of EIR to LIS students search topics;
6. find out the extent of authority of source to utilize EIR;
7. Find out the level of confidence of LIS students in assessing the accuracy of information in EIR

Significance of the Study

The findings of the study would help in understanding the dynamics of electronic information resources usage which will in turn inform curriculum development, instructional strategies, and support services in the field of library and information science, ultimately enhancing students' capacities to harness the potential of electronic information resources (EIRs). The findings have the potential to inform educational policies, instructional practices, and support initiatives aimed at equipping LIS students with the necessary skills to thrive in an increasingly digital information landscape.

REVIEW OF LITERATURE

Digital Literacy Skills

Yo (2021) opined that the capacity to use e-information on the internet differs from the usual print and the way of reading on the internet is a branch a student can navigate to the right or left, based on what is needed more at the moment. This implies that the ability of undergraduates to adequately use EIRs provided by the library depends on their level of digital literacy. Although possession of technical skills is an aspect of digital literacy, one cannot ignore the fact that

individuals must also possess cognitive and information skills that are pivotal for the Google/Net generation, to enable them to make responsive choices. Thus, digital skills may include critical thinking, creativity, collaboration, communication, Information literacy, media literacy, technology literacy and flexibility. Baro, Obaro and Aduba (2019) investigated digital literacy skills of library and information professionals in various libraries in English-speaking countries in Africa. Findings revealed that the respondents rated their level of DL skills to be moderately low. With regards to database search skills, uploading documents to online platforms, skills in applying new technologies to library services, ability to create different file formats and ability to use open source software, respondents rated their skills very high, while on the other hand, metadata development skills and library website development skills were rated moderate and low respectively. Salman et.al (2020) investigated the factors that affect the acquisition of digital literacy skills by 278 undergraduates in the Fountain University library, and the effect of digital skills on the use of EIRs. Results showed that 90 (32.4%) admitted that a lack of digital skills hindered their use of EIRs. The majority 161 (57.9%) and 121 (43.5%) of the respondents identified low internet bandwidth and volatility of online information respectively as a major challenge to their acquisition of digital proficiencies.

In the same vein, Yusuf and Endouware (2021) in their assessment of the digital literacy skills of 100 academic librarians in Nigerian Universities used a questionnaire as a data collection instrument. The study revealed a low level of digital literacy skill possession by the majority of the respondents. This result increases curiosity about the digital literacy level of undergraduates as librarians are supposed to be digital literacy advocates to undergraduates in their quest to use EIRs. The study recommended that both librarians and students should scale up their level of digital literacy skills which is a necessary skill to effectively function in the information age.

Electronic Information Resources Usage

According to the International Federation of Library Associations and Institutions (IFLA), "Electronic resources" refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be retrieved remotely via the Internet or locally IFLA, (2012). Ekenna and Mabawonku (2013) stated that EIRs are the bedrock of academic success as they provide accurate, up-to-date and round-the-clock information for better educational outcomes and aid in the retrieval of the huge amount of information for teaching, learning and research by students and staff in the ivory towers. Opportunities offered by EIRs may have been a factor that motivates their use by undergraduates. Quadri, Adetimirin & Idowu (2014) investigated the purpose of the use of e-information resources by 291 undergraduates in Babcock and Redeemer's universities in Ogun state, Nigeria. The study adopted a descriptive survey design and questionnaire as the instrument of data collection. It was revealed that while 128 (64%) of the respondents in Babcock used EIRs for assignment, the result was not different from Redeemers' as most 49 (89.1%) respondents affirmed to have used e-information resources for assignment. By implication, EIRs seem to be useful to the academic activities of undergraduates. This reason may have informed EIRs' status as an important component in the information infrastructure of libraries as libraries now acquire and provide remote access to EIRs.

Digital Literacy Skill and Usage of Electronic Information Resources.

Digital literacy skill is an important dexterity needed for information access as well as retrieval of relevant and up-to-date resources for students' learning and research activities. Digital literacy skill for electronic information resource searching depends on the user's knowledge of the search system, as well as, the ability to identify the information problem at the starting point of the search. Emwanta and Nwalor (2013) carried out a study on the Influence of computer literacy and subject background on the use of electronic resources by undergraduate students in universities in South-Western Nigeria. The study investigated the influence of computer literacy and subject background on the use of electronic resources by undergraduate students in two universities in Southwestern Nigeria. Results of the study revealed that 8 (7.1%) of the respondents from Federal University of Technology Akure (FUTA) and 30 (19.0%) from Obafemi Awolowo University Ile-Ife (OAU) visit the library to use electronic resources. Although electronic resources in general are regarded as vital tools for academic tasks, 30(26.8%) of the respondents at FUTA and 32(20.3%) at OAU indicated that the Internet is most useful in discovering literature relevant to their subject background.

In addition, Abubakar and Adetimirin (2015) carried out a study on the influence of computer literacy on postgraduates' use of electronic resources in Nigerian university libraries. The study investigated how computer literacy, predisposes postgraduate students to use electronic resources. The study uses survey research design and multi-stage sampling technique to select 2726 postgraduate students from 16 Nigerian universities. The result revealed that 56.3% of postgraduate students are computer literate. They also found out that few of the electronic resources in their libraries were used and the frequency of usage was low. And lastly, computer literacy had a positive relationship with postgraduates' usage of electronic resources.

METHODOLOGY

The population of this study consisted of students of Library and Information Science at Bayero University from levels 100 to 400. The population consisted of undergraduate students only. The total population of undergraduate students in Library and Information Science at Bayero University, Kano, was 554. The study adopted a simple random sampling technique. Each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample. The total sample size for the study was 217 students. Out of 217 questionnaires that were distributed to Library and information science students 100 – 400 level, 211 were recovered (97.2%), while 06 (2.8%) of the questionnaire were not returned by the respondent. This means that a total of 211(97.2%) was used for data analysis and interpretation.

Result and Discussion of Findings

The ability of LIS Students to find Electronic Information Resources

These are Boolean Operators except

These are Boolean Operators except	THE	OR	NOT	AND	Total
Frequency Percentage %	191 (90.5%)	06 (2.8%)	14 (6.6%)	-	211 (100%)

Total of 191 (90.5%) of the respondents chose THE as option that are not Boolean Operator, 06 (2.8%) of the respondent chose OR as an option that are not Boolean Operators and 14 (6.6%) of the respondent choose NOT as an option that are not Boolean Operators. The table also indicates respondent that choose THE 191(90.5%) has the highest percentage

Ability of LIS Students to Utilize Electronic Information Resources

	Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
1	I am able to supplement my lecture with Electronic Information Resources	107 (50.7%)	88 (41.7%)	13 (6.2%)	03 (1.4%)	211 (100%)
2	I can write Assignment with Electronic Information Resources	109 (51.6%)	95 (45.0%)	04 (2.0%)	03 (1.4%)	211 (100%)
3	I am able to write projects with Electronic Information Resources	113 (53.6%)	87 (41.2%)	07 (3.3%)	04 (1.9%)	211 (100%)
4	I can write reports with Electronic Information Resources	90 (42.7%)	110 (52.1%)	10 (4.7%)	01 (0.5%)	211 (100%)
5	I am able to prepare for examination with Electronic Information Resources	74 (35.1%)	115 (54.5%)	16 (7.6%)	06 (2.8%)	211 (100%)

The above table revealed that the majority of respondents (50.7%) were able to supplement their lecture with Electronic Information Resources. While 109 (51.6%) of the respondent indicated that they were able to write their assignment with Electronic Information Resources. Also, 113 (42.7%) of the respondent revealed that they were able to write their Project with Electronic Information Resources. Again, 90 (53.6%) of the respondent indicated that they were able to write their report with Electronic Information Resources. 115 (54.5%) of the respondents Agree that they were able to prepare for examination with Electronic Information Resources.

The ability of LIS Students to share Electronic Information Resources

	Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
1	Share through E-mail facility	90 (42.7%)	105 (49.8%)	16 (7.5%)	-	211 (100%)
2	Share through Blog (e.g Blogger, WordprWordPresslr e.t.c)	52 (24.6%)	110(52.2%)	44 (20.8%)	05 (2.4%)	211(100%)
3	Share through social networks (Facebook, WhatsApp, Twitter etc.)	99 (46.9%)	103 (48.8%)	07 (3.4%)	02 (0.9%)	211 (100%)
4	Share through Wikis(e.g Wikipedia, Wikibooks, Wiktionary, Wikiversity,)	54 (25.6%)	102 (48.4%)	45 (21.3%)	10 (4.7%)	211 (100%)
5	Share through file sharing sites(e.g Dropbox, Airdrop, Box, Google Drive)	67 (31.8%)	107 (50.7%)	35 (16.6%)	02 (0.9%)	211 (100%)
6	Share through Photo sharing sites(e.g Picass, Instagram, Smug Mug e.t.c)	68 (32.2%)	112 (53.0%)	27 (12.8%)	04 (2.9%)	211 (100%)
7	Share through video sharing sites(e.g YouTube, Netflix, Net9ja)	53 (25.1%)	111 (52.6%)	38 (18.0%)	09 (4.3%)	211 (100%)

Result from the table above showed that 105 (49.8%) of the respondent agreed that they can share EIRs through E-mail facility, 110 (52.2%) of the respondent agreed that they are able to share EIRs through Blog, 103(48.8%) of the respondent agreed that they are able to share EIRs through social networks, 102 (48.4%) of the respondent agreed that they are able to share EIRs through Wikis, 107 (50.7%) of the respondent agreed that they can share EIRs through file sharing sites, 112 (53.0%) of the respondent agreed that they can share EIRs through Photo sharing sites, 111(52.6%) of the respondent agreed that they can share EIRs through Video sharing sites,

Ability of LIS students to evaluate Electronic Information Resources

How often do you consider the currency of the resource when evaluating EIRs	Always	Often	Occasionally	Rarely	Never
Frequency Percentage	73 (34.6%)	74 (35.1%)	57 (27.0%)	07 (3.3%)	-

Table 4 above revealed that 73 (34.6%) of the respondent always consider the currency of the resources when evaluating Electronic Information Resources.

Relevance of an electronic information resource to your search topics

How do you determine the relevance of an EIRs to your search topics	Very Important	Important	Neutral	Unimportant
Frequency Percentage	119 (56.4%)	75 (35.5%)	16 (7.6%)	01 (0.5%)

119 (56.4) of the respondent determine the Relevance of Electronic Information Resources in their search very important.

Extent of authority of the author or source in influencing decision to use an electronic information resource

To what extent does the authority of the author or source influence your decision to use an EIR	Extremely Influential	Influential	Neutral	Not Influential	Total
Frequency Percentage	72 (34.1%)	99 (46.9%)	39 (18.5%)	01 (0.5%)	211(100%)

Result from the above table revealed that 99 (46.9%) of the respondents indicated that the level of Influential of the author or source of Electronic Information Resources make them use EIR.

Level of confidence in assessing the accuracy of information within electronic resources

How confident are you in assessing the accuracy of information within electronic resources?	Very Confident	Confident	Neutral	Not Confident
Frequency Percentage	65 (30.8%)	110 (52.1%)	27(12.8%)	09(4.3%)

The result of the analysis indicated that 110 (52.1%) of the respondents are confident in assessing the accuracy of Electronic Information Resources.

Discussion of Findings

The findings of the study showed that:

1. Library and Information Science Students know how to find Electronic Information Resources. This conforms to Quadri, Adetimirin & Idowu (2014) submission that undergraduates' students used EIRs for assignment. This implies that EIRs seem to be useful to the academic activities of undergraduates. This reason may have informed EIRs' status as an important component in the information infrastructure of libraries as libraries now acquire and provide remote access to EIRs.

2. The study showed that Library and Information Science Students utilized Electronic Information Resources for their academics pursuit by supplementing Electronic Information Resources with their lecture. This affirms Emwanta and Nwalor (2013) which postulated that computer literacy and subject background influences the use of electronic resources by undergraduate students in universities in South-Western Nigeria.
3. The result revealed that there is varying levels of agreement in their ability to share electronic information resources through different platforms.
4. Most of the respondents have digital literacy skills and make use of electronic information resources. This corroborates Sahabi, Ebunuwele & Aidenojie (2020) that EIRs provide access to information that might be restricted to users because of geographical locations and financial crunch.
5. Most respondents consider the relevance of electronic information resources to their search topics as very important, always consider the currency of EIRs when evaluating, and a majority of respondents expressed confidence in assessing the accuracy of information within electronic resources.

Conclusion

The findings of the study reveal a commendable understanding and utilization of electronic information resources (EIRs) among Library and Information Science (LIS) students at Bayero University. Across various sections, respondents demonstrated proficiency in recognizing Boolean operators, utilizing EIRs for academic purposes, sharing resources through diverse platforms, and evaluating the relevance, authority, and accuracy of information within EIRs.

Recommendations

Based on the findings, the following recommendations were made:

1. Curriculum planners should formulate policies that will support the frequent use of electronic information resources at the undergraduate levels in order to develop digital literacy skills.
2. The government should equip universities with adequate and functional infrastructure that will encourage the usage of electronic information resources.
3. Institutions should continue to provide training sessions and workshops to enhance LIS students' proficiency in utilizing advanced search techniques and navigating diverse electronic
4. Incorporating information literacy programs into the curriculum can help students develop critical evaluation skills for assessing the credibility, relevance, and accuracy of information within EIRs. Information literacy programs should be integrated across disciplines.

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