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### Information Literacy, ICT Skills and the Use of Electronic Resources by University Librarians in South-East University Libraries in Nigeria

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#### **Abstract**

*The study investigated information literacy, ICT skills and the use of electronic resources by University Librarians in South-East University Libraries in Nigeria. The study adopted a descriptive survey research design using questionnaire as instrument for data collection. The population of the study consists of 6 university librarians from six university libraries in South-East, Nigeria; the population tallies with the specifics of the topic. A total of 6 questionnaires were distributed, all were retrieved. Data collected were analyzed using descriptive statistics mean and percentage mean score of 2.5 and above and percentage score of 50% were considered. The results show the various electronic resources used by university librarians in South-East University libraries in Nigeria as follows: Electronic books (e-book), Online Databases, Adobe Acrobat documents, WebPages and Electronic Journal. The study also affirmed the following as information literacy skills possessed by the university librarians in South-East University libraries in Nigeria in the following order: Ability to find, ability to evaluate, ability to organize, ability to use and ability to communicate. The general result therefore proves that the extent to which university librarians apply information literacy skills in the utilization of electronic resources in South-East University libraries was high. The study recommended that all university librarians should possess certain information literacy skills for effective delivery of their services, and university management should acquire basic electronic resources for university librarians' usage.*

**Keywords:** Information Literacy, ICT Skills, Electronic Resources, University

#### **1.1 Introduction**

A university librarian is a professional who is trained in library and information science. He/she must possess one or all of bachelor's degree, masters or Ph.D. in library and information science, with a certified certificate in Librarian Registration Council of Nigeria (LRCN). The university librarian

will provide vision, strategic direction and leadership to the university's learning spaces and resources, be the executive administrator of all its libraries, he/she will effectively deal with the developments and challenges affecting the library. For the university librarian to perform effectively, the introduction of information literacy to the entire university environment is critical.

Information literacy is the ability to find, evaluate, organize, use, and communicate information in all its various formats, most notably in situations requiring decision making, problem solving, or the acquisition of knowledge. Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. In other words, Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. Information literacy is critical to ICT skills and use of electronic resources by librarians in the library.

Information and technology skills is the ability to adapt to and try out new technologies, as digital technology is continually changing and updating. Information and communication technology (ICT) skills are of great demand and significance in effective and efficient management of educational resources in the school system. The importance of ICT in the educational management is quite evident worldwide and especially in Europe and United States of America (Empirica, 2006). The acquisition and use of ICT skills among university librarians enhances the utilization of electronic resources by university librarians.

Electronic resources (or e-resources) are materials in digital format accessible electronically. Examples of e-resources are electronic journals (e-journal), electronic books (e-book) and online databases in varied digital formats such as Adobe Acrobat documents, (pdf), and WebPages, (html). E-resources can also include articles from newspapers, dictionaries or encyclopedias as

well as images, and many other items. University librarians purchase and subscribe to many items in electronic or e-format so that one can have access free of charge anywhere one has an internet connection. University librarians are now more independent than before as they do not necessarily need to come physically to the library to access information resources that could meet their needs. With the emergence of ICT, librarians can access their libraries' Electronic Information Resources (EIR) from their hostels, offices and homes at their convenience. Moreover, Khan (2016) asserts that hundreds of thousands of monographic materials, journals, learning resources and databases among others, are now available in electronic formats, and these materials can be accessed from remote corners of a country, thereby increasing the use of information, literature and the efficiency of information services. It is some results of these benefits that made this title 'information literacy, ICT skills and the use electronic resources by university librarians in South-East University Libraries in Nigeria' worth researching.

## 1.2 Statement of the Problem

Information technology literacy is important for students' academic work, research and other personal engagements. A student that is information technology literate would have the ability and skill of accessing and critically evaluating information and knowledge resources, especially on contemporary issues and developments in his/her field of study. Electronic information resources offer the 21st century students new opportunities that were not available to previous generations, yet large number of students leave universities without necessary skills to cope within the information-based society. Despite several advantages of electronic information resources and its positive effect on students' academic

performance in universities, many university students are yet to harness the opportunities provided by these initiatives due to inadequate facilities or lack of maintenance culture and even where these facilities are in place, the potential users of these new information sources are not making use of the valuable electronic information resources owing to lack of awareness or lack of skills required to navigate the modern technology.

### 1.3 Objectives of the Study

The main objective of the study is to examine information literacy skill and use of electronic resources by university librarians in South-East University libraries in Nigeria. Specifically, it seeks to:

1. identify the various electronic resources used by university librarians in South-East University libraries in Nigeria.
2. ascertain the information literacy skills possessed by university librarians in South-East University libraries in Nigeria.
3. determine the extent the university librarians apply information literacy skills in the utilization of electronic resources by university librarians in South-East University libraries in Nigeria.

### 2.1 Literature Review

To establish a firm framework for the study, the researcher critically analyzed literature done on the following areas: Information literacy, ICT skills and the use of electronic resources.

### 2.2 Information Literacy

Information Literacy is directly linked with lifelong learning, critical thinking, and learning to learn concepts of education.

Information Literacy is the set of skills needed to find, retrieve, analyze, and use information. The twenty-first century has been named the information era, owing to the explosion of information and the availability of information resources. One cannot achieve study target without practical information literacy skills. In other words, information literacy skills empower the people with the critical skills which will help them to become independent lifelong learners. These skills will enable people to apply their knowledge from the familiar environment to the unfamiliar. Due to information explosion, it has become increasingly clear that students cannot learn everything they need to know in their field of study within a few years at school or the university.

Baro (2011) expressed that the 'information literacy' course content analysis in study of library schools in Africa revealed that the emphasis is on areas such as: the basics of information accessing; recognition of information needs; information searching skills; location of information resources; the ability to evaluate and synthesize information; and the use of information sources including digital sources, the internet, and databases. Information literacy is frequently associated with conducting research. This is exemplified by the inclusion of the "Research as Inquiry" 'frame' in the Framework for Information Literacy for Higher Education published by the Association of College and Research Libraries (2015). The Research as Inquiry frame construes research in the broadest sense as involving several information focused practices, such as determining information gaps, selecting appropriate methods to gather and organize information, and so forth. The scholarship relating 'information literacy' to what is often described as 'original' research frequently focuses on developing insights that inform educational efforts to support higher education students. Increasingly these efforts

include undergraduate students (Hensley & Davis-Kahl, 2017), but are especially relevant to graduate students expected to engage in research in their future careers (Bussell, Hagman, & Guder, 2017). While there is little research focusing specifically on information literacy in collaborative research contexts, information literacy has been related to interdisciplinary research, which typically involves collaboration between researchers from different disciplines (Pilerot, 2016).

### **2.3 ICT Skills and the Use Electronic Resources.**

In recent years, work for the information professional has become characterized by fast-paced change and new skills requirements. This transformation has been brought about by the constant emergence of relevant new technologies (Ashcroft, 2004). Information professionals are increasingly required to adapt their skills and practice in order to gain an awareness of technological advances. As a result, the profession itself exists in a state of flux alongside these emerging technologies, with traditional roles being increasingly subsumed by new skills and working environments and, therefore, job descriptions (Ashcroft, 2004). Information professionals are now expected to be aware of and capable of using and demonstrating emerging ICTs (Nwakanma, 2003). There is a need for additional training to augment the traditional skills knowledge base with a competency in ICT use. Information professionals must be flexible and adapt traditional skills to incorporate the requirements of technological advances (Biddiscombe, 2019). Given the current situation, whereby ICTs are being continuously updated or introduced, and traditional formats are being replaced or supplemented by digital formats (such as e-journals and e-books), it seems likely that there will continue to be a need for regular

training for information professionals.

According to Prangya and Rabindra (2013), awareness is essential for effective use of electronic information resources. When materials are near at hand, the user's ability to access such information resources is greatly diminished. However, when they are open access (i.e., not subscription-based), students locate them and use them for whatever purpose they need. Undergraduate students need information literacy abilities to effectively use EIRs, and if these skills are not present, their academic and research requirements will be hampered. Watt and Igbo (2010) emphasize that the user's capacity to traverse the labyrinth of electronic resources provided through technology-based terminals is critical to their usage of electronic information resources (EIRs). Electronic information is also becoming more significant in the academic world (Egberongbe, 2011). As a technique to increase the use of electronic resources, end-users should be equipped with skills such as information literacy, information retrieval, and computer abilities, among others (Adekinya & Adeyemo, 2006).

The use of electronic information resources by Abia State Polytechnic undergraduate students, for instance, is fraught with difficulties, such as the country's inadequate telecommunications infrastructure, which has been a matter of controversy among scholars and higher education institutions (Adomi, 2005). Poor telecommunication infrastructure, poor navigation skills in navigating e-resources, high cost of Internet subscription, epileptic Internet subscription, unreliable power supply, poor user skills, and restricted access to e-resources are all major challenges that undergraduate students at Abia State Polytechnic face when using e-resources. It's important to emphasize that when undergraduate students are aware of e-resources, they use them to their full potential for academic and research objectives. It is also



vital to note that in order for students to effectively use electronic resources, they must be knowledgeable in the use of information and communication technologies (ICTs) in order to acquire autonomous access to a variety of electronic information resources throughout the world. According to Bozimo (2007), e-resource utilization in Nigerian academic libraries is very low. Although the value and usage of e-resources has grown over time, users, particularly undergraduate students in higher education, still rely on one other's abilities to identify specific knowledge parts.

### 3.1 Research Method

The study adopted a descriptive survey research design using questionnaire as instrument for data collection. The population of the study consists of 6 university librarians from university libraries in South-East, Nigeria. A total of 6 questionnaires were distributed, all were retrieved. Data collected were analyzed using descriptive statistics mean and percentage mean score of 2.5 and above and percentage score of 50% were considered.

**Table 1** Population of the study

S/N	Institutions	Population of librarians
1	Nnamdi Azikiwe University Library	1
2	Chukwuemeka Odumegwu Ojukwu University Library	1
3	Michael Okpara University of Agriculture Umudike Library	1
4	Abia State University Library	1
5	Ebonyi State University Library	1
6	Caritas University Library	1
	<b>Total</b>	<b>6</b>

Table 1 depict the population of university librarians in South-East University libraries in the following order: Nnamdi Azikiwe University Library (1), Chukwuemeka Odumegwu Ojukwu University Library (1), Michael Okpara University of Agriculture

Umudike Library (1), Abia State University Library (1), Ebonyi State University Library (1) and Caritas University Library respectively. The basis for selecting these libraries is as a result of apparent expertise and volume of available literature/information on them.

### 4.1 Result and Analysis

**Table 2: Various electronic resources used by university librarians in South -East University libraries in Nigeria.**

S/N	Items Statement	A	SA	D	SD	X	Remarks
1	Electronic Books (e-book)	2	4	0	0	3.3	Accepted
2	Online Databases	2	3	1	0	3.1	Accepted
3	Adobe Acrobat documents	4	2	0	0	3.6	Accepted
4	WebPages	5	1	0	0	3.8	Accepted
5	Electronic Journal	4	2	0	0	3.6	Accepted

The table 2 shows the various electronic resources used by university librarians in South-East University libraries in Nigeria as follows: Electronic Books (e-book) (3.3), Online Databases (3.1), Adobe Acrobat

documents (3.6), WebPages (3.8) and Electronic Journal (3.6). This implies that university librarians in South-East University Libraries utilized the above electronic resources in their various institutions.

**Table 2: Information literacy skills possessed by the university librarians in South-East University libraries in Nigeria.**

S/N	Items Statement	A	SA	D	SD	X	Remarks
1	Ability to find	2	4	0	0	3.3	Accepted
2	Ability to Evaluate	3	3	0	0	3.5	Accepted
3	Ability to Organize	4	2	0	0	3.6	Accepted
4	Ability to Use	5	1	0	0	3.8	Accepted
5	Ability to Communicate	3	3	0	0	3.5	Accepted

Table 3 affirmed the following as information literacy skills possessed by the university librarians in South-East University libraries in Nigeria in following

order: Ability to find (3.3), ability to evaluate (3.5), ability to organize (3.6), ability to use (3.8) and ability to communicate (3.5) respectively.

**Table 4: The extent the university librarians apply information literacy skills in the utilization of electronic resources by university librarians in South-East University libraries in Nigeria**

S/N	Items Statement	VHE	HE	LE	VLE	X	Remarks
1	To enable university librarians to navigate online platform effectively	2	2	2	0	3.0	Accepted
2	To enable university librarians to research	3	3	0	0	3.5	Accepted
3	To enable university librarians to identify reliable sources of information	4	1	1	0	3.3	Accepted
4	To enable university librarians to engage in collaboration learning	4	2	0	0	3.6	Accepted
5	To enable university librarians to participate in virtual meetings	3	3	0	0	3.5	Accepted

**KEY:** VHE: Very high extent, HE: high extent, ME: moderate extent, LE: low extent, VLE: very low extent, NE: No extent

Table 4 shows the extent to which the university librarians apply information literacy skills in the utilization of electronic resources by university librarians in South-East University libraries in Nigeria in the following order: To enable university librarians to navigate online platform effectively (3.0), to enable university librarians to research (3.5), to enable university librarians to identify reliable

sources of information (3.3), to enable university librarians to engage in collaboration learning (3.6) and to enable university librarians to participate in virtual meetings (3.5). The general result therefore proof that the extent to which the university librarians apply information literacy skills in the utilization of electronic resources by university librarians in South-East University libraries was high.

## 5.1 Discussion of Findings

The study is on Information literacy, ICT skills and the use of electronic resources by university librarians in South-East University Libraries in Nigeria. Three (3) research questions were formulated to guide the study. The result in table 1 shows the various electronic resources used by university librarians in South-East University libraries in Nigeria as follows: Electronic Books (e-book), Online Databases, Adobe Acrobat documents, WebPages and Electronic Journal. This implies that university librarians in South-East University Libraries in Nigeria utilized them very well. The study also affirmed the following as information literacy skills possessed by the university librarians in South-East University libraries in Nigeria in following order: Ability to find, ability to evaluate, ability to organize, ability to use and ability to communicate.

Lastly, the study confirmed the extent the university librarians apply information literacy skills in the utilization of electronic resources by university librarians in South-East University libraries in Nigeria in the following order: to enable university librarians to navigate online platform effectively, to enable university librarians to research, to enable university librarians to identify reliable sources of information, to enable university librarians to engage in collaboration learning and to enable university librarians to participate in virtual meetings. The general result therefore proof that the extent to which the university librarians apply information literacy skills in the utilization of electronic resources by university librarians in South-East University libraries was high.

## Conclusion

Electronic resources are now forms of information resources. The information

contained therein are relevant for University Librarians to achieve their aspirations. However, they cannot be used effectively without the possession of the necessary information literacy skill; the place of information skills, especially regarding search, evaluation and ethical use of information is essential in the face of the information explosion and misinformation. Hence, the emphasis on information literacy skills of University Librarians.

This paper has established that information literacy skills help to improve competencies in information gathering and utilization, and librarians' level of information literacy skills influence how they are able to recognize and access the needed information. This paper found out that librarians in the population studied have adequate literacy skills, even though emphasis must be to sustain and even enhance these skills for what the future holds.

## Recommendations

1. All university librarians should possess certain information literacy skills for effective delivery of their services
2. University management should acquire basic electronic resources for university librarian's usage

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