

INFORMATION LITERACY SKILLS AND INFORMATION USE BY STUDENTS IN TWO SOUTH UNIVERSITY LIBRARIES IN NIGERIA

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Abstract

This study examined information literacy skills and information use by students in the Universities of Uyo and Port Harcourt Libraries. The analytical survey research design was used for the study. The population consisted of 2,758 students from three faculties in the two Universities, while stratified random sampling technique was used to select 600 students in the two universities. Information Literacy Skills and Information Use Questionnaire (ILSIUQ) was the main instrument for data collection. The study had two research questions and two hypotheses. Mean scores were used to analyze the research questions and Pearson Product Moment Correlation co-Efficient (PPMC) to test the hypotheses. The results indicated that all the variables tested are correlated with information use. The study concluded that there is a significant relationship between information literacy skills and information use by students. The study recommended the provision of the necessary facilities in the libraries that will help in the acquisition of information literacy skills by students.

Keywords: information literacy, literacy skills, information use, University libraries, Nigeria

INTRODUCTION

In this age of information society, students are expected to know how to use the library and the available tools to retrieve any required information and to be able to carry out research work with minimal assistance. Sadly though, this has not been the case as many students lack the requisite skills and knowledge to be able to use the library and the available tools to retrieve information, left alone being able to carry out research work. This is because many students especially in Nigeria do not have the information literacy skills needed to perform this exercise. This paper intends to examine the information literacy skills and its use by students in two university libraries in Nigeria.

Information literacy is knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner (CILIP, 2012). The skills that are required to be an information literate person call for an understanding of: a need for information, the resources available, how to find information, the need to evaluate results, how to work or exploit results, how to communicate or share your findings and how to manage your findings. Information literate people are those who have learned how to learn. They know how to learn because they know how information is organized, how to find information and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning because they always find the information needed for any task or decision at hand (Lowe and Spitzer, 2004). An intellectual framework for identifying, understanding, evaluating and using information includes determining the nature and extent of needed information, accessing information effectively and efficiently, evaluating critically information and its sources, incorporating selected information in the learner's knowledge base and value system, using information effectively to accomplish a specific purpose, understanding the economics legal and social issues surrounding the use of information and information technology, and observing laws, regulation and institutional policies related to the access and use of information. Thus, the ability to access, evaluate and use information is a prerequisite for lifelong learning, and a basic requirement for the information society. It is a holistic, interactive learning process. This article adopts the definition given by the U.S. Association of College and Research Libraries (ACRL) (2000) in its Information Literacy Standard for Higher Education. According to ACRL, Information Literacy is set of abilities requiring individuals to recognize when information is needed and have ability to locate, evaluate and use effectively the needed information. Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. Therefore, the concept of information literacy presupposes that an individual recognizes the need for information, and knows how to find, evaluate and subsequently communicate information effectively to solve particular

problems or to make decisions. More importantly, whether information comes from the internet, or the World Wide Web, Online databases, books or document, and other possible sources, inherent in the concept of information literacy is the ability to understand and critically evaluate and make use of information to solve specific problems or tasks at hand.

Statement of the Problem

In spite of the potential benefit of information literacy skills, many students in Nigerian Universities are unable to adequately utilize, the vast information fostered by access to global information network for enhanced academic and research purposes (Ughebu, 2001). Information skills provides impetus for growth at all levels of human endeavour. Thus, the problems facing many students particularly the undergraduates in Nigerian Universities are low information skills (Etim and Nssien, 2007). Inadequate literacy skills among students have led to poor academic performance. Caused by frustrations of inability to locate an information has led to students resorting to mutilating vital library materials and some other anti-social behaviour experienced in the University libraries over all the country.

Etim (2007) observed that the use of electronic information superhighway is already in high esteem in the world where prior knowledge of search skills was manual. According to her, traditional library skills taught to students have been mere location skills, but digital retrieval skills have hitherto not been taught. She further noted that because most library workers have not fully comprehended this retrieval mode, hence, information literacy skills remains totally alien to most library users including students.

Lowe and Spitzer (2004) reported on undergraduate education and identify' the need for more active learning whereby students become self-directed independent learners who are prepared for life-long learning. Also, Usman (2005) argued that, because knowledge matters, understanding how people and societies acquire and use knowledge and why they sometimes fail to do so is essential to improving people's lives. Thus, important perhaps even more critical, is the skill for acquiring and using information. It is regrettable to note that most students can not locate or identify the needed information sources in the library. Equally, they cannot access the internet when searching for information. This is attributed to poor literacy skills. It explains reasons for mutilation, stealing and vandalism of the library materials in spite of the fact that human and financial resources have been committed to build a sound library collection in the university system to support research and learning.

Based on this, the study seeks to examine the impact of information literacy skills among students and use of information sources in University of Uyo and University of Port Harcourt Libraries.

Objectives of the Study

- 1) To examine the relationship between students' skills in formulating Search Strategies and information use in the Universities of Uyo and Port Harcourt Libraries,
- 2) To examine the relationship between the students' skills in evaluating the needed information sources and information use in the Universities of Uyo and Port Harcourt Libraries

Research Questions

- 1.) Is there relationship between students' skills in formulating Search Strategies and information use in the Universities of Uyo and Port Harcourt Libraries,
- 2) Is there any relationship between the students' skills in evaluating the needed information sources and information use in the Universities of Uyo and Port Harcourt Libraries,

Research Hypotheses

- 1) There is no significant relationship between the students' skills in formulating search strategies and information use in the Universities of Uyo and Port Harcourt Libraries.
- 2) There is no significant relationship between the students' skills in evaluating the needed information sources and information use in the Universities of Uyo and Port Harcourt Libraries.

Significance of the Study

The role of library in an academic environment like the university cannot be emphasized. However, the ability of the users (students) to locate the needed information is crucial and paramount for efficient academic work. The problem of mutilating library books and other anti-social behaviour experience in the university libraries shows that the users (students) lack the necessarily information literacy skills for information handling, as well as other information seeking behaviour traits. This investigation is directed at suggesting possible ways of re-directing students towards library skills acquisition for effective utilization of information sources in the library. Thus, this will serve as a guide for librarians who are charged with the responsibility of making information sources available to the users, to teach the users (student's) literacy skills that could enhance them to become potential information users in the 21st century. It is expected that from the findings and recommendations made, it will emerge a new body of knowledge that would enhance the librarians in the two Universities to have in-depth knowledge on the important of information literacy skills and information use and thereby

take positive steps to develop their information system to match with the new age. Finally, the work will avail the crucial roles of possessing positive literacy skills and its positive impacts on academic achievement. It will add to literature on literacy skills acquisition in the Nigerian environment.

LITERATURE REVIEW

Information literacy is the ability to identify which information is needed, understand how the information is organized, identify the best sources of information for a given need, locate these sources, evaluate the sources critically and share that information. It is the knowledge of commonly used research techniques. According to Etim (2007), information literacy has to do with the ability to recognize when information is needed and how to locate, evaluate, effectively use and communicate information in its various formats. Implicitly a full understanding of information literacy is the realization that several conditions must be simultaneously present. First, people must desire to know, use analytic skill to formulate questions, identify research methodologies and utilize critical skills to evaluate experimented and experiential results. Second, people must possess the skills to search for answers to those questions in increasingly diverse and complex ways. Third, once the users have identified what is sought, they should be able to access it. There is therefore an urgent need to make a great leap forward in teaching information literacy. Library users on the electronic information superhighway are already helplessly, thrust into a world where prior knowledge of search skills is assumed. Traditional library skills taught to students have been mere location skills, and digital retrieval skills have hitherto not been taught. This is because most library workers have not fully comprehended this retrieval mode. Thus, the concept of information literacy skills remains totally alien to most library users. Recent assessments of the role of libraries in the academia have brought out outcomes that establish the importance of information literacy skills (Eisenberg, Lowe and Spitzer, 2004). Reports on undergraduate education identify the need for more active learning whereby students become self-directed independent learners who are prepared for lifelong learning. Basically, the attributes of an information literate person is such that the person should be able to:

- (i) recognize that accurate and complete information is the basis for intelligent decision-making,
- (ii) recognize the need for information,
- (iii) identify potential sources of information,
- (iv) develop successful search strategies,
- (v) access sources of information, including computer based and other technologies,
- (vi) Evaluate information,

- (vii) organize information for practical application,
- (viii) integrate new information into an existing knowledge, and
- (ix) use information for critical thinking and problem solving.

Information literate students are competent and independent learners that know their information needs and actively engage in the world of ideas. They display confidence in their ability to solve problems and know what relevant information is and manage technology tools to access information and to communicate effectively. They operate comfortably in situations where there are multiple answers as well as those with no answers. They hold high standards for their work and create quality products. Information literacy students are flexible, can adapt to change and are able to function independently and in groups, whether information comes from a computer, a book, a government official, a film, a conversation, a poster or any number of other possible sources. Inherent in the concept of information literacy is the ability to dissect and understand what we see on pages or television screen, in posters, pictures and other images, as well as what we hear... According to Bruce(1997), seven ways in which individuals experience information literacy, the so-called “seven faces” of information literacy can be outlined as in the following table:

Table 1: Ways of experiencing information literacy

Category	Explanation
The information technology conception	Information skills is seen as using information technology for information retrieval and communication
The information sources conception	Information skills is seen as finding information located in information sources
The information process conception	Information skills is seen as executing an information related process
The information control process	Information skills is seen as controlling information
The knowledge construction conception	Information skills is seen as building up a personal knowledge base in a new area of interest
The knowledge extension conception	Information skills is seen as working with knowledge and personal perspectives adoption in such a way that novel insights are gained
The wisdom conception	Information skills is seen as using information wisely for the benefit of others

Source: Bruce (1997)

To Bruce therefore, information literacy should not be regarded as skills and training, but as stages required to becoming an information literate person. The author maintains that information literacy is about people's ability to operate effectively in an information society. This involves critical thinking, an awareness of personal and professional ethics, information evaluation, conceptualizing information needs organizing information, interacting with information professionals and making effective use of information in problem solving, decision making and research (quoted in Secker and Price, 2004). Baro and Fyneun (2009) studied information literacy among undergraduates students in the Niger Delta university. Their results showed that male students in the faculty are more aware and use information sources available in the university more than female students. 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 related to information technology skills, but it has broader implications for the individual, the education system, and for society. Information literacy skills enable an individual to use computers, software applications, databases, and other technologies to achieve a wide variety of academic, work-related, and personal goals. Information literate individuals necessarily develop his own search strategies.

The Students' Skills in Identifying the Needed Information Sources and Information Use

Identification of information needs is essential to the design of information systems in general and to the provision of effective information services in particular (Devadason, 2009). In order to identify information needs one should adopt various methods to gather information on the various factors that influence the information needs. Devadason (2009) noted that no single method or tool will serve entirely. A careful selection and blending of several techniques depending on the user whose need is being studied is necessary. In fact, the "information needs identifier" should study, prepare and equip himself thoroughly to perform the task of identifying information need. According to Crawford (1993) information needs depend on: (i) work activity, (ii) area of interest, (iii) availability of facilities, (iv) hierarchical position of individuals, (v) motivation factors for information needs, (vi) need to take a decision, (vii) need to seek new ideas, (viii) need to validate the correct ones, (ix) need to make professional contributions, and (x) need to establish priority for discovery. Crawford (1993) further noted that information needs are affected by a variety of factors such as:

- (i) the range of information sources available,
- (ii) the uses to which the information will be put,

- (iii) the background, motivation, professional orientation and other individual characteristics of the user'
- (iv) the social, political, economic, legal and regulatory systems surrounding the user; and
- (v) the consequences of information use.

Hence, information needs identification is a complex process. Some of the factors adding to the complexity are:

- (i) same information is perceived by different users differently as their information need. (Value system of users differ due to the nature of work and it affects factors such as the information products and services).
- (ii) researchers need original documents whereas planners need digests of 'point of view);
- (iii) information is put to different uses (r & d personnel, application developers and technicians all put information to different uses);
- (iv) need is satisfied by having access to the identified information in a particular package and form, and at a suitable time;
- (v) the flow of information and channels of communication are complex and add to the complexity; and
- (vi) individual preferences and behavioural aspects add a further dimension.

Apart from the complexities mentioned above, there are problems due to individual behaviour too:

- (i) a user may not like to reveal his need as he may like to show that he is above (any) requirements and that he knows his sources. To divert or mislead he may give or just because some one else is getting an information he may give a pseudo need to receive the same information. A super ordinate, to avoid a subordinate getting informed, may give it as a pseudo need and try to withhold the information received, and
- (ii) further, an interaction of all the above factors makes the process of identifying information needs akin to carrying out an investigation or detective work, and is one of the 'grey areas' of research in Library and information Science for the past few decades.

In order to identify information needs to have some insight into the actual information needs one should adopt various methods to gather information on the factors that influence the information needs. No single method or tools will ye entirely. A careful selection and blending of several techniques depending on user whose need is being studied is necessary Devadson (2009).

Steps in the Process of Identifying Information Needs

(1). Preparation for Identification of Information Needs, (2). Study of Subjects;
(3). Study of the Organization and its Environment .(4.) Study of the User's Specific Environment (5). Study of the User (6). Formal Interview (7) Continuous refinement and updating Information needs

The Students' Skills in Formulating Search Strategies and Information Use

A search strategy is a plan for finding relevant information. This is an important step for any information-problem solving exercise. Dalrymple (2001) defined it broadly as a conscious approach to decision making to solve a problem or achieve an objective. According to Noodle (2005), information search strategies involve the identification of relevant information sources; selecting search terms or other symbols, developing search profiles, modifying profiles by literature search strategies, etc. It allows effective searching leading to identification of the required information either from a library or an information system. It is different from "searching tips" that apply to specific situations.,

The development of effective search strategies is, according to Hjørland (2005) depend on knowledge of database coverage, of available subject access points and their relative information value for the topic being searched, such as the relative value of searching descriptors (i.e. assigned controlled terms) versus cited references versus free text fields, such as titles, abstracts or full texts. He said, planning a search strategy can save time in the information problem-solving and/or research process in the long run. It allows the searcher to search for information in many different places. It helps the searcher to focus his search so he can choose the most useful indexes or databases with which to start, and equally helps the searcher to find a larger amount of relevant information. Hjørland (2005) further noted that a good search strategy is usually preceded by a 'search preparation exercise'. The author listed the parameters that will influence how a search is carried out to include:

- (i) what is wanted (i.e. a definition of a clear and concise search objective)?
- (ii) what is known about what is wanted?
- (iii) what information access tools are available? (iv) how those access tools are constructed, and
- (v) what is known about the structure of those access tools?

That is, the layout of the bibliographic elements within the source.

In searching for relevant resources, the searcher would also need to ask the following questions:

- (i) does my topic fit within any broad subject area(s)?
- (ii) Would a subject index, a general index or both suit my needs?
- (iii) Do I need current information or historical information on my topic?
- (iv) Is there a subject index in print, but not electronic format that will be helpful?

The above search preparation exercise would then be followed by query formulation. This is the process of composing a statement for the information need in terms suitable to the retrieval system. A more systematic approach would be thinking about:

- (i) finding the focus of the question,
- (ii) what the key concepts are (iii) understanding these concepts, and
- (iv) alternative terms to describe these concepts.

RESEARCH METHODOLOGY

The study used the descriptive research . This design was deemed most appropriate because of the variables which the study examined to determine their influence on student's information needs and use of information which were not manipulated. The population of the study was 2,758. This consists of all year three students in faculties of Arts, Engineering and Science in the Universities of Uyo and Port Harcourt in the 2008/2009 academic session. 600 students formed the sample size, 100 from each of three faculties in the two university libraries in the South-South zone of Nigeria selected through stratified random sampling technique. The sample framework is shown in Table 2.

Table 2: Sampling Framework

University	Faculty of Arts Yr 5	Sample Size	Faculty of Engr. Yr3	Sample size	Faculty of Science Yr3	Sample size
University of Uyo	424	100	163	100	677	100
University of Port Harcourt	720	100	210	100	564	100
Total	1,144	200	373	200	1,241	200

Source: 2008/2009 Students Registration Register from the 2 Universities

A Questionnaire tagged “Information Literacy Skills by Students and Utilization of Information Questionnaire (ILSSUIQ)” was used as instrument for data collection. The instrument was divided into two sections A and B. Section A consists of demographic data from respondents, section B consists of information on the literacy skills by students and utilization of information. The instrument was given to two experts in the faculty of Education University of Uyo to validate while face validity of the instrument was done through another expert in the same university. The reliability of the instrument was obtained through trial test. The test was carried out on 20 students outside the study area, the Cross River State University of Science and Technology (CRUTECH) was used. The result of the first and second test on the students was computed through Pearson Product Moment Correlation coefficient (PPMC). The result yielded reliability index of 0.83.

The University of Uyo was established in October 1991 as a conventional federal university. It took over the premises, students and other assets and liabilities of the erstwhile University of Cross River State established in 1983. As at 2006/2007 academic year, the University had a student population of about sixteen thousand (16,000) with staff population of two thousand, five hundred (2,500), eighty (80) undergraduate and fifty three (53) postgraduate academic programmes. The University is in the heart of Uyo, capital of Akwa Ibom State, the largest oil producing state in Nigeria. Uyo is easily accessible by road and three International Airports within 150km radius, Calabar and Port Harcourt Airports and Uyo international airport about 12 km from the capital. University of Uyo has 12 faculties, School of Postgraduate studies, School of Continuing Education, School of Basic Studies and Remedial Studies as well as various Research centres.

On the other hand, the University of Port Harcourt was established in 1975 as one of second generation universities in the country. Located in Port Harcourt the capital of River state, the University of Port Harcourt is made up of fifteen (15) faculties. Both universities are located at the South-South geo-political zone of Nigeria. They occupy strategic position in the training of manpower for the country, the two universities have automated their information resources and have Internet services in the library for possible access by students and staff of the university community. This becomes the major reasons for the choice of the two universities for the study purpose.

RESULTS AND DISCUSSIONS

Research Question 1

Is there any relationship between students' skills in formulating search strategies and information use in the Universities of Uyo and Port Harcourt libraries.

Table 3: Mean distribution analysis of the respondents responses on students' skills in formulating search strategies and information use

S/n	Students' skills in formulating search strategies	Total rating	No. of respondents	Mean X
1.	Individual should assess the value of various types of information resources before commencement of search strategy	1414	570	2.48
2.	The individual must determine what the information need is before starting to search	1540	570	2.70
3.	The individual needs to know the basic concepts and keywords that will helping the search strategy	1545	570	2.70
4.	The individual has to realize the importance of using more than one information source before starting to search for information	1460	570	2.56
5.	The individual should be able to identify the criteria for evaluating information sources to enhance retrieval	1620	570	2.84

Accepted at 2.50 and rejected below 2.50

Table 3 above shows that items 2, 3, 4 and 5 with mean (x) scores 2.70, 2.70, 2.56 and 2.84 were all above the accepted level of 2.50, meaning that there is a significant relationship between students' skills in formulating search strategies and information use in the library. However, item 1 with mean (x) score of 2.48 which is below the accepted level, which implies that individual student should not assess the value of various type of information sources before commencement of the search strategies.

Research Question 2

Is there any relationship between students' skills in evaluating information sources and information use in the universities of Uyo and Port Harcourt libraries?

Table 4 Mean distribution analysis of the respondents responses on students' skills in evaluating information sources and information use

S/n	Students' skills in evaluating information sources	Total rating	No. of respondents	Mean X
1.	Author's expertise can be evaluated through the writer's qualification	1380	570	2.42
2.	Currency and recency of information sources can be evaluated with the help of bibliographic description	1540	570	2.70
3.	Genial style of presentation of the information is appropriate to the materials and comprehensible	1440	570	2.53
4.	To establish the relevance of an information a second opinion must be solicited from a knowledgeable colleague	1465	570	2.57
5.	An authoritative work is identified by its accurateness, up-to-dateness and objectivity	1540	570	2.70

Accepted at 2.50 and rejected below 2.50

Table 4 above indicates that the mean (x) scores for students skills in evaluating information sources and information use in items 2, 3, 4, and 5 were all above the accepted level of 2.50, meaning that there is a significant relationship between students' skills in evaluating the needed information sources and information.

Hypothesis 1

There is no significant relationship between the students' skills in formulating search strategies and information use in the Universities of Uyo and Port Harcourt libraries.

Table 5: Pearson product moment correlation coefficient analysis between students' skills in formulating search strategies and information use.

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r.cal	r.crit	Df
Students' skills in formulating search strategies (x)	3799	3022621	2791500	0.940	0.088	568
Information utilization (y)	3780	2,908400				

Significant, $P < .05$

Table 5 above shows that the computed value of “y” which is 0.940 is greater than the critical value of “r” which is 0.088 at 568 degrees of freedom at 0.05 level of significant, meaning that the null hypothesis is rejected, while the alternative hypothesis is accepted. Hence, there is a significant relationship between the students’ skills in formulating search strategies and information use in the Universities of Uyo and Port Harcourt libraries.

Hypothesis 2

There is no significant relationship between the students’ skills in evaluating the needed information sources and information use in the Universities of Uyo and Port Harcourt Libraries.

Table 6 Pearson product moment correlation coefficient analysis on students’ skills in evaluating the needed information sources and information use

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r.cal	r.crit	Df
Students’ skills in evaluating needed information sources (x)	3595	2779825	2458550	0.827	0.088	568
Information utilization (y)	3770	3170500				

Significant, $P < .05$

Table 6 above shows that the computed value of “r” which is 0.827 is greater than the critical value of “r” which is 0.088 at 568 degree of freedom at 0.05 level of significant. This means that the null hypothesis is rejected, while the alternative hypothesis is accepted. This implies that there is a significant relationship between the students’ skills in evaluating the needed information sources and information use in the Universities of Uyo and Port Harcourt libraries.

RECOMMENDATIONS

Based on the findings of this study and subsequent conclusions of the study, the following recommendations are made

- (1) The students’ literacy skills should include ability to recognize when information is needed and have the ability to locate and should effectively use the information for the required purposes.
- (2) The students should be taught how to use both print and electronic information sources
- (3) Information literacy skills should be included either as course or part of a course to be taken by students preferably in the early part of their university education. Such courses should also be taught by professionals.

CONCLUSION

It is found in this study, that information literacy skills are applicable and adaptable to everyday situations in life and will determine the quality of an individual life and usefulness in academic environment and society. However, most appropriately, information literacy skills are used for academic purposes, such as research papers and group presentations in the university. Therefore, the students skills to find, evaluate, identify, use and share information is a vital skill that enhance students to effectively and efficiently utilize the resources of the library. The study was restricted to two universities in the South zone of Nigeria. These universities occupy a strategic position in the training of the manpower needs of the country. They are located within the states with highest oil production in the country.

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