



Submitted on:04.09.2018

*Satellite Meeting: Africa Section
Libraries as Centers of Community Engagements for Development
22-23 August 2018
Kuala Lumpur, Malaysia*

Information Literacy Competency of Secondary School Students of Owerri West, South East, Nigeria

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Abstract:

The study investigated information literacy competency of secondary school students in Owerri West, South East of Nigeria. The crux of the paper is to ascertain the level of information literacy knowledge and skills of the students, and their practical ability to effectively utilize information knowledge and skills. Further investigation was carried out to find out strategies employed by the students to meet their information needs. The survey research design was adopted for the study. A structured questionnaire was used for data collection. Purposive sampling technique was used to select sample size of 300 students across all the years of studies, from two secondary schools in Owerri West. Three hundred copies of questionnaire were administered with a return rate of 85%. For data analysis, the study adopted frequency counts, simple percentage and mean scores. There was also the use of illustrations and data visualization in the study. The findings revealed that the respondents possess low level of information literacy skills. Their practical ability to effectively utilize information literacy skills was found to be on the average. This was revealed through the responses on information literacy skills. The responses were significantly low in the areas of evaluating information, distinguishing sources of information and formulating search strategies.

Keywords: Information literacy; Literacy competency; Secondary school students; Owerri West, Nigeria.

Introduction

Information Literacy (IL), as a concept, has its roots in the emergence of the information society. According to Bundy (2001), the concept in itself was the result of rapid growth in the availability of information around the globe through developments in information and communication technology. We are today in the age of information society and students are expected to have the knowledge of use of the library and available tools in accessing and retrieving required information for their learning and study activities. In many cases, this has not been the real situation on ground as many students lack the requisite skills and knowledge of the use of the library and the available tools to retrieve needed information.

The common understanding about IL is knowing when and why you need information, where to locate the information and how to evaluate, use and communicate such information in the most ethical manner. In this respect, certain fundamental decisions and actions need to be taken and they: (i) deciding when information is needed and where to locate such information (ii) evaluating the information retrieved (iii) making use of the information and communicating same in a manner construed to be most ethical. The American Association of College and Research Libraries in its Information Literacy Standard for Higher Education identified information literacy as set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information (ACRL, 2005.)

For secondary schools in Nigeria, being information literate is very necessary so that the students would be able to sieve through and identify relevant and reliable information they get from the internet, newspapers, television and even friends for their school work. With the increasing trend of information digitization and the manner information and communication technologies (ICTs) are being used in our daily lives, information literacy becomes increasingly necessary competency to equip the students with the required skills to navigate in the endless offer of information to meet their information needs in school. Schubert et al. (2014) posit that a proper means of measuring and assessing information literacy, as well as exploring pedagogies to improve it, are essential in understanding its educational impact and using it to prepare our young ones for their future tasks. No large scale assessment or study has been conducted so far in Nigeria to find out students' level of information literacy skills, as well as specific information literacy skills they are good at or weak in. This study, therefore, aims to investigate and gather data about information literacy competency of secondary school students in Nigeria. The study investigated the students' skills in searching, evaluating and using information in their academic quests life endeavours.

Objectives of the Study:

The following formed the objectives of the study:

1. To determine the level of information literacy skills of secondary school students in Owerri West, South East, Nigeria.
2. To identify the literacy programmes the students have been exposed to.
3. To ascertain the availability and use of various libraries and other human information sources by the students.

4. To find out the students level of knowledge about information ethics and collaborative information seeking.
5. To identify the strategies adopted by the students in satisfying their information needs.
6. To identify the challenges facing the students in their information literacy skills acquisition.

Research Questions:

The following research questions guided the study:

1. What is the level of information literacy skills of secondary school students in Owerri West, South East, Nigeria?
2. What literacy programmes are the students exposed to?
3. What is the current usage of various libraries and human information sources by the students?
4. What is the students' level of knowledge about information ethics and collaborative information seeking?
5. What strategies are adopted by the students in satisfying their information needs?
6. What are the challenges facing the students in their information literacy skills acquisition?

Scope and Delimitation of the Study

The present study is delimited to two secondary schools in Owerri West Local Government Area of Imo State, South East, Nigeria, namely Holy Rosary International College, Owerri and Boys Secondary School, New Owerri. The study highlights the level of information literacy skills of the students, their knowledge about information ethics and strategies they adopt in satisfying their information needs.

Review of Literature

Conceptual Framework

The term Information Literacy (IL) has been variously defined and explained by many scholars. Kapitze (2003) identifies that information literacy was coined by Paul Zurkowski in the early 1970s to draw attention to the needs of people working in the newly emerging technological environment. Bruce (2002) and Stern (2002) have maintained that information literacy is a natural extension of the concept of literacy in our society. In the same vein, some scholars have associated information literacy with information technology (Mitchel, 1996) just as Kuhlthau (1990) sees information literacy as synonymous with library skills.

Okon, Etuk and Akpan (2014) say "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." Omeluzor et al. (2013) quoting Kerns identifies that Paul Zurowski first defined information literacy in 1974, where he said that an information literate person is anyone who had learned to use a wide range of information sources in order to solve problems at work and in his or her daily life. Adeyemi (2017), states that information literacy is one of the most important learning skills of the 21st century. He adds that "it is important for every secondary school student to possess the traits of information literate person so as to be ahead in their study and general endeavours." Todd, Lamb and McNicholas (1992) define

information literacy as “a holistic interactive learning process encompassing the skills of defining, locating, selecting, organizing, presenting, and evaluating information.”

Theoretical Framework

Okon, Etuk and Akpan (2014) have identified that a “full understanding of information literacy is the realization that several conditions must be simultaneously present.” They posit that 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 also possess the skills to search for answers to those questions in increasingly diverse and complex ways. Third, that once the users have identified what is sought, they should be able to access it. Schubert et al. (2014) citing Mokhtar et al. identified that a group of researchers from Nanyang Technology University (NTU) in 2010 proposed a model to help develop information literacy standards for schools in Singapore. According to them, the model was constructed using existing international information literacy standards as a guide basing it on the paradigm of a popular information and technology literacy process model known as the Big6 categories in terms of Techniques and Tools, and supplements the categories with three important areas of Ethics and Social Responsibility, Collaborative Information Behaviour and Attitudes and Perceptions. Bruce (1997) states seven ways in which individuals can experience information literacy, which he refers to as “seven faces” of information literacy. This is shown in the table below.

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 Conception	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 new insights are gained
The Wisdom Conception	Information skills are seen as using information wisely for the benefit of others.

Source: Bruce (1997).

From Bruce’s ‘seven faces’, information literacy skills are experienced in seven different mindsets thus: information technology, information sources, information processing, information control, knowledge construction, knowledge extension and using information wisely.

Challenges of Information Literacy Programme

In their study on challenges of information literacy skills and perception in Colleges of Education in Nigeria, Anyaoku, Anunobi and Eze (2015) identify lack of capacity

development or training opportunity; increasing workload; poor facilities; no provision for mentoring and lack of regulation of curriculum on information literacy as the major challenges to information literacy programme. Information literacy programmes are carried out differently in various institutions and schools. Omeluzor et al. (2013) in their study on information literacy skills among postgraduate students of Babcock University, Nigeria reveal that the major challenge faced by students of the university regarding information literacy skill level of the students was the need to learn to navigate through the online public access catalogue (OPAC). According to the study conducted by William and Wavell (2006), the interest of students to learning information literacy skills is minimal and this makes them not to possess required attributes to be information literate persons.

Research Methodology

The survey research design was adopted for the study. A simplified structured questionnaire was used for data collection. The instrument was a four point Likert scale of measurement ranging from strongly agree (rated 4), agree (rated 3), disagree (rated 2), and strongly disagree (rated 1). Purposive random sampling was used to select a sample size of three (300) students, 150 from each of the two (2) secondary schools studied. Students of the highest class level in the two secondary schools were selected, and the gender was evenly distributed. (Table 2 shows the distribution of the sample size of the study.) Three hundred (300) copies of the questionnaire was administered to the respondents with the assistance of the form masters. Five days period was allowed for filling the questionnaire before collection. Out of the 300 copies of questionnaire distributed, 256 completed and usable copies were obtained and used for the analysis. The analysis was done using simple frequency counts, percentages, and mean scores with the acceptable mean benchmark of 2.50.

Table 2: Sample Size of the Study

S/N	Name of School	Gender	Sample	Return Rate	Percentage
1.	Holy Rosary International College, Owerri	All Female	150	132	88
2.	Boys Secondary School, New Owerri	All Male	150	124	83
	Total		300	256	85

Results and Discussions

Results

The analysis of the results was done by answering the research questions formulated at the beginning of the paper.

Research Question 1: What is the level of information literacy skills of secondary school students in Owerri West, South East, Nigeria?

Table 3: Students' level of information literacy skills

Variable	SA	A	D	SD	Mean
1. Ability to determine when information is needed.	12(4.6%)	65(25.4%)	81(31.6%)	98(38.4%)	1.96
2. Ability to locate sources of needed information.	18(7.0%)	74(28.9%)	82(32.0%)	82(32.0%)	2.10
3. Ability to evaluate needed information.	6(2.3%)	32(12.5%)	103(40.2%)	115(44.9%)	1.72
4. Ability to understand the need to use information wisely.	98(38.2%)	112(43.8%)	31(12.1%)	15(5.9%)	3.14
5. Ability to retrieve information in any format from any source.	52(20.3%)	73(28.5%)	87(33.9%)	44(17.1%)	2.51
6. Ability to use information effectively to solve problems.	104(40.6%)	92(35.9%)	45(17.6%)	15(5.9%)	3.11
7. Ability to access information effectively.	45(17.6%)	65(25.4%)	103(40.2%)	43(16.8%)	2.43
8. Ability to understand ethical use of information	13(5.0%)	81(32.0%)	121(46.2%)	43(16.8%)	2.26

N = 256

Table 3 presented data on students' response on their level of information literacy skills. The table revealed that the skills majority of the students possess are the ability to understand the need to use information with the mean score of 3.14, and ability to use information effectively to solve problems with the mean score of 3.11. The students also possess the ability to retrieve information in any format from any source (mean score of 2.51.) Few of the students possess the ability to determine when information is needed, locate sources of needed information, evaluate retrieved information and understand ethical use of information.

Research question 2: What literacy programmes are the students exposed to?

Table 4: Students Exposure to Information Literacy Programmes

Variable	SA	A	D	SD	Mean
1. Library orientation/tours.	85(33.2%)	127(49.6%)	31(12.1%)	13(5.1%)	3.10
2. Library instructions.	79(30.8%)	96(37.5%)	47(18.4%)	34(13.3%)	2.85
3. Introductory lessons on information literacy.	51(19.9%)	66(25.7%)	81(31.7%)	58(22.7%)	2.42
4. Information search skills.	39(15.2%)	42(16.4%)	95(37.1%)	80(31.3%)	2.15
5. Research skills lessons.	13(5.1%)	52(20.3%)	107(41.8%)	84(32.8%)	1.97
6. Online information search skills.	21(8.2%)	44(17.2%)	113(44.1%)	78(30.5%)	2.03
7. Schools debating competition.	9(3.5%)	17(6.6%)	152(59.4%)	78(30.5%)	1.83

N = 256

Table 4 presents relevant data on students' exposure to information literacy programmes. Results from the table show that students get exposure on library orientation, tours and instructions. This is confirmed by the mean scores of 3.10 for library orientation/tours and 2.85 for library instructions. Other information literacy programmes that would have improved literacy skills of the students, such as information search lessons, online information search skills, schools debating competition and introductory lessons on information literacy skills were neglected.

Research question 3: What is the current usage of the library and human information sources by the students?

Table 5: Students' Use of Library and Human Information Sources

Variable	SA	A	D	SD	Mean
1. Uses the School library daily for information needs.	5(2.0%)	17(6.6%)	181(70.7%)	53(20.7%)	1.89
2. Uses the School library rarely for information needs.	13(5.1%)	24(9.4%)	140(54.7%)	79(30.8%)	1.8
3. Uses the School library sometimes for information needs	128(50.0%)	94(36.7%)	34(13.3%)	—	3.36
4. Never used the School library for information needs.	—	21(8.2%)	152(59.4%)	83(32.4%)	1.75
5. Consults classmates and friends for information needs.	73(28.5%)	90(35.2%)	37(14.5%)	56(21.8%)	2.70
6. Consults teachers for information needs.	110(43.0%)	71(27.7%)	54(21.1%)	21(8.2%)	3.05

N = 256

Table 5 shows that majority (Mean score of 3.36) of the students use the library sometimes for their information needs. In the same vein, majority of them consult fellow classmates and teachers for their information needs as confirmed by the mean scores of 2.70 and 3.05 respectively. All the other items in the table obtained a mean score of below 2.50 and could not be accepted.

Research question 4: What is the students' level of knowledge about information ethics and collaborative information seeking?

Table 6: Students' Level of Knowledge about Information Ethics and Collaborative Information Seeking

Variable	SA	A	D	SD	Mean
1. Gives credit and asks for permission to use other people's intellectual works.	81(31.6%)	88(34.4%)	59(23.0%)	28(11.0%)	2.86
2. Obeys the right to privacy of individual's activities and deliberations.	51(20.0%)	67(26.2%)	93(36.3%)	45(17.5%)	2.48
3. Develops regard for the consequences of actions such as malicious use, manipulation and destruction of information.	20(7.8%)	17(6.6%)	138(53.9%)	81(31.7)	1.90
4. Has regard for completeness, quality and accuracy.	35(13.7%)	51(19.9%)	96(37.5%)	74(28.9%)	2.18
5. Uses the ideas of others as one's own.	52(20.3%)	118(46.1%)	66(25.8%)	20(7.8%)	2.78

N = 256

Table 6 shows that the students possess minimal level of knowledge about information ethics and collaborative information seeking. Results in the table show that the students only give credit and ask for permission to use others intellectual works as confirmed by mean score of 2.86. Paradoxically, majority of the students (Mean score of 2.78) use the ideas of others as their own confirming their low level of knowledge about information ethics. Results further show that students do obey the right to privacy of individual's activities, develop regard for the consequences of malicious use, manipulation and destruction of information, and regard for quality and accuracy.

Research question 5: What strategies are adopted by the students in satisfying their information needs?

Table 7: Strategies Adopted by the Students in Satisfying their Information Needs

Variable	SA	A	D	SD	Mean
1. Consults primary and secondary sources for class assignments.	104(40.6%)	92(35.9%)	40(15.6%)	20(7.8%)	3.09
2. Consults books in the library for class assignments.	97(37.9%)	81(31.6%)	66(25.8%)	12(4.7%)	3.02
3. Consults classmates in doing class assignments.	136(53.1%)	77(30.1%)	35(13.7%)	8(3.1%)	3.33
4. Consults family members in doing home works.	110(43.0%)	81(31.6%)	26(10.2%)	39(15.2%)	3.02
5. Browses the internet in doing home assignments	62(24.2%)	91(35.5%)	70(27.3%)	33(13.0%)	2.71
6. Consults the library catalogue in locating needed materials in the library.	23(9.0%)	42(16.4%)	121(47.3%)	70(27.3%)	2.07
7. Finds needed materials by browsing the library shelves directly.	89(34.8%)	94(36.7%)	28(11.0%)	45(17.5%)	2.88
8. Seeks librarians' assistance in locating needed information materials in the library.	34(13.3%)	71(27.7%)	130(50.8%)	21(8.2%)	2.46

N = 256

Table 7 provides information on the strategies adopted by the students in satisfying their information needs. Mean scores of the respondents on the listed items indicate that the students consult primary and secondary sources for class assignments (3.09), consult books in the library (3.02) and classmates (3.33) for the same purpose. They browse the internet (2.71) and consult family members (3.02) for their homework. The result further revealed that students adopt the practice of browsing directly the library shelves to find needed information materials (2.88).

Research question 6: What are the challenges facing the students in their information literacy skills acquisition?

Table 8: Challenges to Students Information Literacy Skills Acquisition

Variable	SA	A	D	SD	Mean
1. Students do not receive adequate library orientation and tours	70(27.4%)	83(32.4%)	61(23.8%)	42(16.4)	2.70
2. Non inclusion of information literacy lesson in the school curriculum.	97(38.0%)	102(40.1%)	33(12.9%)	22(9.0%)	3.05
3. Students lack access to effectively organized School library materials.	81(31.6%)	94(36.7%)	29(11.3%)	52(20.4%)	2.79
4. The negative influence of internet contents.	31(12.1%)	55(21.5%)	99(38.7%)	71(27.7%)	2.17

N = 256

Table 8 shows challenges the students are often confronted with in their information literacy skills acquisition. The result indicates that three of the listed items in the table were considered as challenges to information literacy skills acquisition by the students based on the observed mean scores. They are that students do not receive adequate library orientation program and tours (2.70); non inclusion of information literacy lesson in the school curriculum (3.05); and lack of access to effectively organized information materials in the library (2.79). However the negative influence of internet contents is not regarded as a challenge to information literacy skills acquisition by the respondents (2.17).

Discussions

The study assessed the information literacy competency of secondary school students in Owerri West, Nigeria based on the precepts of identifying need for information, ability to locate, evaluate and use information wisely. The findings of the study revealed that Owerri West secondary school students possess low level of information literacy skills as the only observable skills they possess are ability to understand the need for information, retrieve and use information. They lack the other relevant information literacy skills such as locating sources of information, evaluating retrieved information and understanding the ethical use of information. This is in variance to the definition of Information Literacy (IL) give by ALA (1989) as the ability to locate access, search, evaluate and use information in various contexts.

The performance assessment of the respondents on practical ability to effectively utilize information literacy skills was on the average. They do not obey the right to privacy of individual's activities; do not show regard for the consequences of actions such as malicious use, manipulation and destruction of information; and they do not have regard for completeness, accuracy and quality of information they retrieve. However, they give credit to and ask for permission to use other people's intellectual works.

Regarding the challenges of information literacy skills acquisition, it was quite obvious that the respondents are not given adequate library orientation and tours. The library management of the two schools have not realized the indispensable role of this programme to students'

information literacy skills. Another challenge related to this is that information literacy lesson training is not included in the school curriculum. The respondents expressed strong feelings about this challenge, and their feeling is in consonance with the findings of a study done by Suleiman (2012) who found out that user education class helps to increase students searching skills.

Conclusion and Recommendations

Conclusion

This study shows that students in Owerri West, Nigeria require information literacy skills to sieve through the mass of information for their information needs. It is also evident from the study that the students' level of information literacy skills remains low. At the same time, there are some challenges identified to have been militating against effective acquisition of information literacy skills by the students. Prominent among the challenges is poor library orientation and user education programmes. There is also the non-inclusion of information literacy lessons in the school curriculum. These factors and indeed others are incidentally necessary to be addressed if information literacy competencies of the students are to improve.

Recommendations

Based on the findings of the study, the following recommendations are put forward:

1. Information literacy skills lessons should be included in the school curriculum to enhance students' information literacy skills.
2. The school libraries, as a matter of routine policy, should put in place library orientation programmes and tours especially on the retrieval and search tools for the students for efficient use of the library resources.
3. The teachers in the schools should often give the students class assignments and homework that will compel them to search for information from various information sources.
4. Parents and guardians also have role to play in teaching their wards to appreciate that not everything in the internet is true. This will reduce the distractions the students face when they browse the internet.
5. The schools should ensure and maintain information literacy formulation and implementation policy in their schools to inculcate information literacy skills to students in line with the information literacy competency standards.

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