AN ASSESSMENT OF INFORMATION LITERACY SKILLS OF STUDENTS IN SELECTED SECONDARY SCHOOLS IN IBADAN, OYO STATE

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Abstract

The study assessed the information literacy skills of students in selected secondary schools within Ibadan metropolis; Senior Secondary School II (SS2) students in both public and private secondary schools in Ibadan constituted the sample for the study. Survey research design was adopted; questionnaire was used for data collection while the Statistical Package for the Social Sciences (SPSS) was adopted for data analysis. The study revealed that students in both public and private secondary schools are aware of information literacy and they attested that they got the knowledge through their teachers. It was also revealed that secondary school students in Ibadan can evaluate information; they were of the opinion that information from a recognized authority should only be used and also with careful screening. The study further revealed that library use instruction needs to be further entrenched and encouraged in both categories of secondary schools so that students will be well equipped for and enabled to obtain information from various available sources. Recommendations were made on how to improve the information literacy skills of students and also ensure its proper inclusion in schools' curricula.

Keywords: Information literacy skills, Secondary school students

Introduction

Every human being, no matter the level of education, sophistication, affluence and location, needs and selects information from the environment which he applies to the solution of a problem or satisfaction of a want as the case may be (Uhegbu, 2001). Information literacy is a very vital discourse in this area. Information literacy skills are the skills one will need throughout one's life and they need to be inculcated in human beings right from childhood; primary through secondary school up to the university days and even beyond. Students must be information literate in order to reap the benefits of the global society. As noted by Chowdhury et al (2008), the concept of information literacy involves not only the ability to effectively use information sources to find information, but also, and more importantly to be able to evaluate it and its origins, and thus to use it properly. The concept involves several skills, and in an information society in which more and more information is available (and in some cases necessary to function as a citizen), the ability to acquire and apply these skills has become more and more important.

Objectives

This study assessed the information literacy skills of students in selected secondary schools in Ibadan, Oyo State, Nigeria. The specific objectives of the study are to:

1. investigate secondary school students' awareness of information literacy in Ibadan;
2. assess the ability of secondary school students to use the library;
3. assess the ability of secondary school students to evaluate information.

Statement of the Problem

Schools and libraries in Nigeria are being fitted with electronic technologies, but a very pertinent question to ask is whether students are being prepared for the onslaught of information that is provided by these technologies. Students are exposed to more information from the Internet than previously conveyed by a teacher or textbook and there is the problem of what should be done when faced with so many informational possibilities and also, problem with the determination of which is credible and which is not. The sheer abundance of information will not in itself make students informed without a complementary cluster of abilities necessary to use information effectively and efficiently (Ottong, 2005).

Being information literate requires knowing how to clearly define a subject or area of investigation, select the appropriate terminology that expresses the concept or subject of interest, formulate a search strategy that takes into consideration different sources of information and the variable ways that information is organized (ALA, 1989). Secondary school students need to develop a deeper understanding of how and where to find information, the ability to judge whether that information is meaningful, and ultimately how best that information can be incorporated to address the problem or issue at hand. They need an understanding of knowing when and why information is needed, where to find it, and how to evaluate, use and communicate it in an ethical manner (CILIP, 2007).

Signification of the Study

Consider the tremendous changes in both the amount and variety of information resources, as well as great changes in technology that affect every area of our lives; such changes requires us to know more and learn more about the world around us. This study will shed more light on the importance of information literacy in the society. This study is also significant in that it will aid teachers, school library media specialists, educational administrators and even entire communities in developing ways of involving students not only in using classroom materials but also using information resources from the broader community and the mass media. It may also be useful for professionals in the field of education in the area of incorporating information literacy programmes into the curriculum of secondary school students (particularly in Ibadan Oyo State).

The study will be beneficial to all stakeholders in education as it will further expose them to the realization of the several benefits of information literacy and how it can enhance the performance of secondary school students in their academics and also make them lifelong learners. It may also be useful in the area of further research as it may serve as a platform upon which future research could be built.

Literature Review

Everyone uses information whether it be citizens, workers, problem solvers or lifelong learners. Traditionally, schools have provided the setting where individuals learn how to learn (Doyle, 1994). Major learning competencies include formulating questions, accessing potential sources of information, evaluating the information for accuracy and pertinence, organizing the information, and finally, applying the information to answer the original questions – the last and most valuable step in the process.

Although there is no overall consensus on the definition of 'information literacy', perhaps one of the most widely quoted is that of the American Library Association (ALA) Presidential Committee on Information Literacy which in its 1989 report stated:

> *"To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. Ultimately, information literate people are those who have learned how to learn. They know how to learn because they know how knowledge 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 can always find the information needed for any task or decision at hand."*

This definition highlights the interconnection between information literacy and lifelong learning and the context within which it appears; it states that information literacy is not only important in the sphere of formal education but to society as a whole, so that a responsible and informed citizenry can be created.

Information literacy is an umbrella term encompassing a range of skills (Kolade, 2009). In a presentation at the 24th annual conference of the Nigerian School Library Association, she enumerated the components of information literacy as follow:

1. Literacy skill: - Literacy refers to the ability to read and write. This skill is crucial for information retrieval since books remain vital sources of information. Children should be encouraged to do free voluntary reading by ensuring that they have access to 'healthy' and pleasurable books and other information materials that interest them.
2. Library Use Skills: - Students need to be taught how to use the library. Chowdhury et al (2008) posit that user education and training: including information skills training need to be organized for library users on a continuous basis.
3. Thinking Skills: - Critical thinking is a very important component of information literacy; it is necessary for making decision on the kind of information needed to solve problems. This skill enables students to learn independently without memorizing facts alone.

The Big 6 Model of Information Literacy

Within the context of various disciplines, a successful information literacy programme requires an individual to be able to define a problem, initiate a plan to find information; locate and access resources; use the information; synthesize information; and carry out

some forms of evaluation. This is summarized in what is now commonly referred to as the Big 6 model which was developed by Eisenberg and Berkowitz to describe the components of information literacy (Eisenberg and Johnson, 2002). According to them, the student assignments that require the use of multiple informational resources are essentially information problems, which can be solved through a systematic process of thinking about the task at hand and the activities and resources required for task completion

One of the model's major advantages is its apparent simplicity through which students grasp the six steps quickly and in such a way that they can conceptualize the process as a whole as well as their own location within it at any given point in time (Eisenberg, 2008). Based on the Big6 Models, Mike Eisenberg and Bob Berkowitz submitted as follow:

1. Clarification of task: The first step in the Information Literacy strategy is to clarify and understand the requirements of the problem or task for which information is sought.
2. Locating: The second step is to identify sources of information and depending upon the task, sources that will be helpful may include books, encyclopedias, maps, almanacs, etc. They may be in electronic, print, social book marking tools, or other formats.
3. Selecting/analyzing: Step three involves examining the resources found to determine which information is useful or not useful in solving the problem.
4. Organizing/synthesizing: It is here that the information which has been selected is organized and processed so that knowledge and solutions are developed. Examples of basic steps in this stage are: discriminating between fact and opinion, noticing various interpretations of data and organizing ideas and information logically.
5. Creating/presenting: Information or solution is presented in an appropriate format: a paper could be written, presentations made or graphs or other illustrations presented.
6. Evaluating: Finally, a critical evaluation of the completion of the task is done. Was the problem solved? Was new knowledge found? What could have been done differently?

Education Environment in the Twenty-First Century

In the 21st century, enormous changes are occurring in education throughout the world as a result of new information and technological developments and these changes affect every segment of society and all levels of education. Teachers need to acquire new sets of technology and electronic information skills in order to effectively prepare and teach students the knowledge base in all disciplines as well as relevant information skills. Schools need to teach their students to integrate learning opportunities into everything they do in order to become successful in the constantly changing work environment and in society.

Students need to obtain high levels of information literacy during every phase of their education. They have to achieve excellent skills in reading, writing, mathematics and critical thinking to be successful in the new millennium. The significance of information

literacy education lies in its potential to encourage deep, rather than surface learning, and in its potential to transform dependent learners into independent, self-directed, lifelong learners. Without information literacy, people are condemned to lack of information, dependence upon others for access to knowledge and information, and even to acute levels of information anxiety.

Research Methodology

Research Design
This study adopted the survey research design. Surveys can be divided into two broad categories: the questionnaire and the interview (Trochim, 2006). The study adopted the survey design; specifically the questionnaire, because it was considered ideal for measuring people's opinions on information literacy and it had been used and its effectiveness proven by several other scholars.

Population of the Study
The study population comprised Senior Secondary School 2 (SS2) students within Ibadan. There are about 380 secondary schools (both public and private) in Ibadan spread across the five (5) Local Government Areas within the metropolis; of the number of schools, 303 are public secondary schools while the rest are private. Of the 303 secondary schools that are public, ninety-eight (98) are senior secondary schools. These public senior secondary schools and the private secondary schools were the foci of the study.

Sample and Sampling Technique
The secondary schools that constituted the sample were randomly selected using purposive random sampling technique. The researcher selected a total of two (2) secondary schools (a private one and a public one) purposively in each of the five Local Government Areas making a total of ten (10) secondary schools in all the Local Government Areas. The criteria for the selection of the secondary schools included the existence of a school library and the possibility of obtaining adequate information that manifested the phenomenon of interest.

Fifteen percent (15%) of the entire population of students in the Senior Secondary School Class 2 (SS2) of each selected secondary school was then also randomly selected to constitute the sample population for the study. The selection of SS2 as the class of interest was based on the fact that students in this class were in the best position to demonstrate their information literacy skills since they would be the next generation of SS3 students and were about to complete their secondary school education (See Table 1). The Local Government Areas, the selected schools for the study, the population size of the SS2 students and the sample size of respondents are listed in Table 1:

Table 1: Distribution of Population Size, Sample Subjects and Sample Size

S/N	Local Govern ment Area	Name of School Public	Popul-ation Size	Sample Size (15%)	Private	Popul-ation Size	Sample Size (15%)
1.	Ibadan North	Orogun Grammar School, Orogun.	280	42	Yinbol College, Orogun.	40	6
2	Ibadan North East	Army Day Secondary School, Iwo Road.	300	45	Kings & Queens College, Old-Ife Road.	47	7
3.	Ibadan North West	Jericho High School, Jericho.	266	40	Shalom Christian College, Jericho.	33	5
4.	Ibadan South East	Ibadan Grammar School, Molete.	320	48	Fola Model College, Felele.	60	9
5.	Ibadan South West	Basorun Ogunmola High School, Ring road.	234	35	Sunshine College, Ring-Road.	20	3
	Total	-	1,400	210	-	200	30

Data Collection Instruments

The major instrument utilized for this study was the structured questionnaire because of its capacity to generate objective data which in turn, guaranteed the opportunity of generalizing the findings. Also, the structured questionnaire was adopted because of its standardized wordings, its uniform questions and standardized instructions for recording responses which ensured uniformity from one measurement situation to another. Its impersonal nature also provided anonymity for respondents.

The structured questionnaire included questions covering the demographic characteristics of respondents, their knowledge of information literacy and access to information. In essence, the questionnaire was designed to meet the objectives of the study and the main features of information literacy skills were considered in its development.

Reliability and Validity of the Instrument

The validity of the research instrument was effected mainly by using content validity approach. The structured questionnaire was given to three Library and Information

Science professionals to evaluate. Their evaluation led to necessary corrections to ensure that the instrument measured what it was designed to measure. The instrument was pre-tested before it was finally administered in order to ensure that it served its desired purpose. The result showed a reliability coefficient of 0.7 for the questionnaire.

Data Collection Procedure
A total of two hundred and forty (240) copies of the questionnaire were directly administered to the respondents selected from ten (10) secondary schools purposively drawn from the five (5) Local Government Areas within Ibadan metropolis. The data collection was done within three (3) days with the aid of field assistants who were also knowledgeable about research and majority (80.4%) was retrieved.

Method of Data Analysis
Raw data obtained during the work was converted into meaningful data through the use of various statistical tools. In order to draw conclusions and make useful inferences, the data were analyzed using descriptive statistics: simple percentages, frequency counts and cross tabulations. Data analysis was done electronically through the use of the Statistical Package for the Social Sciences (SPSS) software on the computer to facilitate speed and accuracy.

Data Analysis and Discussion
A total of two hundred and forty (240) copies of the questionnaire designed for the study were administered to the students, out of which only one hundred and ninety-three (193) copies were returned with useful responses, making a response rate of 80.4% which was considered adequate for the study.

Personal Information

Table 2: Demographic information of respondents:

| | | Frequency/Percentage | |
		Public schools	Private schools
Sex of respondents	Male	53 (32.3%)	18 (62.1%)
	Female	111 (67.7%)	11 (37.9%)
	Total	164 (100.0%)	29 (100.0%)
Age of respondents	12-15 years	69 (42.1%)	18 (62.1%)
	16-18 years	77 (47.0%)	7 (24.1%)
	19 years and above	18 (11.0%)	4 (13.8%)
	Total	164 (100.0)	29 (100.0%)

Table 2 reveals that majority of the respondents (111 persons or 67.7%) from the public secondary schools were females while majority of the respondents (18 persons or 62.1%) from the private schools surveyed were males. The table further reveals that the larger proportions of respondents in the two categories of schools (public and private schools) were in the age category of 12–18years with response rate of 140 or 89.1% and 24 or 82.7% respectively. This implies that there were no under aged students among the respondents or pupils in the secondary schools.

Table 3: Respondents' Background in Library Usage

Response		Frequency/Percentage	
		Public schools	Private schools
Library availability in school:	Yes	145 (88.4%)	22 (75.9%)
	No	19 (73.1%)	7 (24.1%)
	Total	164 (100.0%)	29 (100.0%)
Attendance at library orientation:	Yes	120 (73.2%)	20 (69.0%)
	No	44 (26.8%)	9 (31.0%)
	Total	164 (100.0%)	29 (100.0%)
Frequency of use of library:	Always	65 (39.6%)	9 (31.0%)
	Occasionally	92 (56.1%)	20 (68.9%)
	Never	7 (4.3%)	0 (0.0%)
	Total	164 (100.0%)	29 (100.0%)
Level of familiarity library use	Very familiar	60 (36.6%)	13 (44.8%)
	Not so familiar	92 (56.1%)	13 (44.8%)
	Not familiar at all	12 (7.3%)	3 (10.2%)
Total		164 (100.0%)	29 (100.0%)

It could be seen from table 3 that majority of the respondents (145 persons or 88.4%) from the public secondary schools reported the existence of a school library in their respective schools while majority of the respondents from the private secondary schools (22 persons or 75.9%) also reported the existence of a school library in their schools. There are 120 respondents (or 73.2%) in public secondary schools that reported they had attended a library orientation programme while 20 respondents (or 69.0%) in private

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secondary schools also reported they had done same. Forty-four respondents (26.8%) and nine (31.0%) in public and private secondary schools respectively, reported that they had never attended an orientation programme in the library.

Furthermore, it could be seen from the table that the frequency of usage of the school library by the respondents is relatively higher in the public secondary schools than in the private secondary schools visited. Sixty-five respondents (39.6%) in the public schools visited reported regular usage of the school library while only nine respondents (31.0%) from the private schools reported regular usage of the school library. Majority of the respondents from the public schools (92 persons or 56.1%) reported occasional usage of the school library while nine respondents (31.0%) from the private schools reported occasional usage of the library. This may imply that there is still further need for library awareness to be done among secondary school pupils especially in the public secondary schools where seven respondents (4.3%) reported they never used the library; though greater awareness of the advantages of using the school library should also be carried out in private secondary schools.

Table 3 also presents information on the level of familiarity of the respondents with library use. It shows that 36.6% of the respondents (60 persons) in the public schools reported that they were very familiar with library use, which means that they were rarely assisted by librarians or others any time they used the library. Thirteen respondents from private schools (44.8%) also reported being very familiar with library use. Ninety-two respondents from public schools (56.1%) reported that they were not so familiar with the use of the library while thirteen respondents (44.8%) from the private schools also reported that they were not so familiar with library use. Twelve respondents (or 7.3%) and three respondents (10.2%) from public and private schools respectively, reported that they were not familiar with library use at all. The implication of this is that library use instruction, which is also a form of information literacy education, needs to be further entrenched and encouraged in both categories of secondary schools so that students will be well equipped for and enabled to obtain information from various available sources.

Awareness of secondary school students about Information literacy
Table 4 reveals that majority of the respondents in both public (139 respondents or 84.8%) and private (18 respondents or 62.1%) schools affirmed their awareness about information literacy. This implies that the secondary school pupils are aware of what information literacy is all about.

Table 4: Respondents' opinion on awareness about Information literacy

	Frequency/Percentage	
Response	Public school	Private school
Yes	139 (84.8%)	18 (62.1%)
No	25 (15.2%)	11 (37.9%)
Total	164 (100.0%)	29 (100.0%)

Table 5 is a summary of how the respondents got aware of information literacy. Pupils' awareness of the concept is a very important achievement in making them lifelong

learners and also ensuring that they have the ability to recognize, locate, evaluate and apply information to their advantage and development.

Table5: How the pupils got aware of information literacy

Means of getting Awareness	Frequency/Percentage	
	Public school	Private school
Parents	57 (34.8%)	5 (17.2%)
Friends	22 (13.4%)	5 (17.2%)
Teacher	76 (46.3%)	18 (62.1%)
School librarian	9 (5.5%)	1 (3.4%)
Total	**164 (100.0%)**	**29 (100.0%)**

Table 5 shows that majority of the respondents from both public and private schools attested that they got to know about information literacy through their teachers in school with response rates of 76 respondents (or 46.3%) and 18 respondents (or 62.1%) respectively. This implies that the teacher is a major source through which pupils get awareness about information literacy. This finding supports Doyle (1994) that schools have provided the setting where individuals "learn to learn".

Table 6: Respondents' opinion on evaluating information on the Internet

Statement	Frequency/Percentage	
	Public school	Private school
One should only use information on the Internet that is offered by a recognized authority on the subject or that can be verified using other sources	111 (67.7%)	25 (86.2%)
Most of the information on the Internet has not been checked for accuracy of content and so should not be used without careful screening and evaluation	53 (32.3%)	4 (13.8%)

Table 6 shows that majority of the respondents in public secondary schools (111 persons or 67.7%) and private secondary schools (25 persons or 86.2%) attested to the fact that one should only use information on the Internet that is offered by a recognized authority on the subject or that can be verified using other sources. This may imply that secondary school students in Ibadan believe that there is need to evaluate any information from the Internet to establish its quality. Evaluation, one of the components of the Big6 model of Eisenberg and Berkowitz adequately captures this.

Discussion of Findings

The study revealed that secondary school students in both public and private schools in Ibadan know about information literacy and this awareness they got through their teachers. The awareness through their teachers in school may be as a result of the

introduction of library use education and library period in the various schools as part of library development project of the government.

The study further revealed that secondary school students are not so familiar with library use as many of the respondents from both the public and private schools visited reported not being familiar with library use which leads back to the fact that library use and library use instruction needs to be further entrenched in schools' curriculum. Also, the findings from the study brought to fore the ability of the students in both public and private schools to evaluate information. This is established through their belief that information on any subject retrieved from the Internet must be verified using other sources as well as the fact that they recognized the need that only information by recognized authorities on the Internet should be used.

Summary of findings
The study is a comparative one and it focused on information literacy skills of students in selected secondary schools within Ibadan metropolis; Senior Secondary School II (SS2) students in both public and private secondary schools within the metropolis constituted the sample. The background to the study gave a general introduction of the topic. The statement of the problem was made. The significance of the study were enumerated and literatures relevant to the topic were reviewed. Findings revealed that a school library existed in both public and private secondary schools; but while majority of the respondents reported attending library orientation programmes, many of them also reported not being familiar with the library and visiting the library occasionally. The study assessed secondary school pupils' knowledge about information literacy. It was discovered that pupils in both public and private secondary schools are aware of the concept of information literacy and they get such awareness from teachers in their respective schools. Finally, findings revealed that students in both public and private secondary schools in Ibadan are able to evaluate information for its reliability and usefulness.

Conclusion
Developing lifelong learners is central to the mission of several educational institutions (including secondary schools in Ibadan); and by ensuring that individuals have the intellectual abilities of reasoning and critical thinking, and by helping them construct a framework for learning how to learn, these institutions provide the foundation for continued growth throughout their careers, as well as in their roles as informed citizens and members of communities. It is stating the obvious that secondary school students in Ibadan are knowledgeable about information literacy but they need to develop a greater level of competence in the application of the concept to their everyday lives; their ability to recognize when there is an information need and also to locate the needed information has to be further sharpened. There is a heavy emphasis on technology infrastructure and basic Information Technology (IT) skills in many situations however, providing students and teachers with the necessary technology to learn to access information in different ways is also important.

Information literacy occurs at the intersection of teaching, thinking and learning, within the broader environment of technology. From the findings of the study, it is quite obvious that school librarians and teachers play very vital and significant roles in the process of cultivating information literacy in the students hence the need for these teachers and other education professionals (especially librarians) to be well equipped to discharge their duties properly.

Finally, for information literacy to be well appreciated and applied in secondary schools in Ibadan (and Nigeria as a whole), there has to be teamwork in the implementation of the concept. The government has to work hand in hand with school authorities and other relevant bodies and also provide the necessary infrastructure(s) and enabling learning environment for the students in order to ensure its improvement and continuity in the educational system.

Recommendations
Though findings from this study show that secondary school students in Ibadan are knowledgeable about the concept of information literacy, a lot can still be done to improve this knowledge and ensure that these students turn out to be life-long learners. The following are some of the issues that the governments, school communities, collaborative partnerships and individuals might consider in further promotion of information literacy:
Mediating the information process - Students need help to make connections between skills and process, and good quality work and increased knowledge and understanding. Reflection by students is required throughout the process, to examine appropriateness of actions and decisions in relation to purpose and these needs to be explicitly acknowledged and mediated or guided.

Implementing information literacy: - There may be need for broad shifts that involve movement from a teacher-centered to a learner-centered view of learning, and an increased emphasis on understanding the perceptual worlds of students and their pedagogical implications. Also, international, national and institutional guidelines and policies that can direct and support the adoption of information literacy education could be put in place.

Lastly, information literacy education is not possible without partnerships; hence there is the need for partnerships between key personnel: students, information specialists, information technology specialists, curriculum designers, community organizations, teachers, amongst others.

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