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Information Literacy Search Skills of Students in Five Selected Private Universities in Ogun State, Nigeria: A Survey

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INFORMATION LITERACY SEARCH SKILLS OF STUDENTS IN FIVE SELECTED PRIVATE UNIVERSITIES IN OGUN STATE, NIGERIA: A SURVEY

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ABSTRACT

The study investigated the knowledge of information literacy and search skills of students in five selected private universities in Ogun state, Nigeria. It also examined students' ability to distinguish diverse information sources as well as assess the effectiveness of information literacy programmes of private universities. The sample consists of 359 respondents drawn proportionately from a population of 400 from the selected universities. Descriptive survey method was used to elicit data through the Monash University Library Questionnaire on Information Literacy in this study. The data collected were analyzed using simple percentages. It was found that preponderance of respondents have low knowledge of information literacy skills, showed high deficiency in identifying diverse information sources and the various information literacy programmes of the respondents' institutions lacked hands-on. The study concluded that sound information literacy skills is a desideratum in knowledge acquisition in the twenty-first century and recommended inter alia; that information literacy skills be integrated into the secondary and tertiary schools' curricula. Thus, the need for an enhanced and continuous library user education geared towards empowering students to be sufficiently familiar with information sources, mutual collaboration between teachers and librarians to ensure integrated mode of lecture delivery, constant advocacy and sensitization outreaches.

INTRODUCTION

Upcoming scholars, especially university freshmen and undergraduates often experience difficulty searching and using information effectively. Ignorance of information literacy skills is at the root of students' search difficulties and poor performance in school. Cultivation of appropriate information literacy skills is pertinent to students' ability to search and use information effectively. Sasikala, C and Dhanraju, V (2011) observed from conclusions of previous research on information literacy (IL) that students think they know more about accessing information and conducting of library research than they are able to demonstrate in practice. Some students do not know when information is needed, how to recognize good sources of information, how to locate relevant information, use and communicate it effectively. The relevance of information literacy skills in research is still abstract to many students, including the lifelong learning implications. Information literacy has drawn attention from librarians, researchers, conference organizers and educational institutions because of the successful impact it has on the effective use of information (Al-Aufi, Ali and Al-Azri, Hamed, 2013).

Most often, hundred level students are as ignorant as those that have never entered the four walls of a university. However, information literacy education will equip them with requisite research skills. A number of undergraduates have had to contract out serious research projects and assignments, due to lack of the necessary research skills. Others plagiarize and copy the work of authors and past projects without acknowledging such works. In this age of unlimited information, an understanding of the diverse information sources and needed search skills to acquire, evaluate, use and communicate information is very critical (Sasikala and Dhanraju, 2011). Educational institutions such as the universities have key role in the equipment and development of human resources, and the libraries and information centers in these institutions

play a key role in the development of information literacy skills among students. CILIP (2005) describe information literacy as knowing why and when information is required, Where to find the needed information, how to evaluate, use and communicate it in an ethical manner. Thus, an information literate person must have an understanding and know when:

- Information is needed

- How to find information

- The need to evaluate results

- How to work with or exploit results

- Ethics and responsibility of use

- How to communicate or share your findings

Understanding information literacy implies that one identifies a need, and that information is needed, why information is needed, what and how much, what kind of information is required as well as any associated constraint in terms of time, how current, and access as well as recognizing that information is available in a wide range of format in various other media.

ALA (1989) contends that an information literate individual must be able to recognize when information is required and have the ability to locate, evaluate and use effectively the needed information. In the same vein Jeremy Shapiro & Shelley Hughes (1996) define information literacy as a new liberal art that extends from knowing how to use computer and access information to critical reflection of information itself, its technical infrastructure and its social, cultural, and philosophical context and impact. Information literacy is a vital part of university education (Association of College Research Libraries, 2007)

The United States of America in recognition of the primacy of information literacy designated October 2009 as "National Information Literacy Awareness Month (Obama, 2009). Information is essential and basic to human existence and national development. Bruce (2000) and Doyle (1994) describes information literacy as a persons' or individual's ability including skills of managing information and the knowledge to apply such information. Horton, F.W (2008) describes information literacy as a set of skills, attitudes and knowledge necessary to know when information is required for solving a problem, make decision, and articulate the needed information in searchable terms and language. Then search efficiently for the information, retrieve it, interpret and understand it, organize it, evaluate its credibility and authenticity, assess its relevance, communicate it others if necessary, then utilize it to accomplish bottom-line purposes. In the same vein, Goad (2002) rightly avers that success, both personal and organization comes from finding essential information and optimizing its effectiveness. He concludes that today's workplace demands skills for a knowledgeable and productive use of information. Information literacy skills empower the individual students to effectively manage and use information and thus become efficient learners.

Nkiko (2005) citing carpenter (1989) observes that information literacy is primarily rooted in the concept of library user educated bibliographic instruction. It is the ability to recognize when information is needed, ability to locate, evaluate and use effectively needed information. He further opines that information literacy is the basis of lifelong learning, and an information literate person is one who:

- Recognizes that accurate and complete information is the basis for intelligent decision making.

- Recognizes the need for information

- Knows how to locate needed information

- Formulates questions based on information needs

- Identifies potential sources of information

- Develops successful search strategies

- Accesses sources of information including computer based and other technologies

- Evaluates information no matter what the source

- Organizes information for practical application

- Integrates new information into an existing body of knowledge

- Uses information in critical thinking and solving problems

- Uses information ethically and legally.

Objectives of the Study

The specific objectives of the study are to:

- Assess students' knowledge of information literacy skills and mastery of information search skills

- Examine students' ability to distinguish between information sources

- Examine students' ability to locate useful information

- Assess through students' responses the effectiveness of information literacy programmes of private universities.

Research Questions

The study attempted to provide answers to the following questions:

- How knowledgeable are students about information literacy skills?

- How many of the respondents can actually search for information using information literacy skills?

- Are students able to identify or recognize relevant information sources?

- How effective are the information literacy programmes of private universities?

Review of Literature

Librarians have an important role in supporting students' acquisition of information literacy skills. Authors within the field of information literacy almost without exception emphasize the importance of collaboration between libraries and teachers. At the same time, they maintained that librarians have no monopoly on issues of information literacy.

Librarians and Information Literacy

Professional librarians should not only be able to recognize and locate information, they should also be able to recognize cognitive content of materials. They equally have a very vital, and evolving, role in collaborating with faculty to implement the changes necessary for an effective information literacy curriculum (Williams, and Zald, 1997). Nayak, V.D; Nayak, R.R and Murgod, S.G (2006) citing Fowell and Levy asserts that "Information professionals have the opportunity to take a leading role in developing and delivering the learning support strategies which will be appropriate to this new environment, acting as significant culture change agents in their institutions". The information age characterized by Internet and other ICT technologies provides for the professional librarian opportunities to influence, contribute, and make changes to information processing, management and access.

ALA recommends that: Librarian education and performance expectations need to include information literacy (ALA, 1989). Peacock (2004) argues that the role of librarians is changing as they seek to devise, develop and implement strategies and systems which embed information literacy in the curriculum. Andretta (2005) citing Rader (1991) observed that prior to the introduction of information literacy, librarianship training concentrated on information services such as collecting, organizing, and accessing information, and offering excellent library services including well developed user-instruction programs.

The National Forum co-sponsored with UNESCO, IFLA and several experts' meetings resulted in the Prague Declaration (2003) and the Alexandria Proclamation (2005) each underscoring the importance of information literacy as a basic fundamental human right and lifelong learning.

Eisenberg, Michael and Berkowitz, Robert (2003) identified the component of information literacy tagged as the Big Six.

Information Literacy and Library Instruction

Andretta, Susie (2005) noted that information literacy evolved from library education practices. Information developed to address the requirements generated by phenomena such as information overload caused by the rapid developments in digital technologies. Lichtenstein (2000) claims that current practice of library instruction concentrates on activities that introduce students to the library environment, including its resources, services and physical layout of its collection. Bruce (1997) explains that information literacy function of libraries imbues in users the ability to locate, manage and use information effectively for a range of purposes. Nkiko (2005) opines that information literacy is an important skill which allows people to engage in effective decision –

making, problem solving and research. It enables them to take responsibility for their own continued learning in areas of personal or professional interest.

Becoming information literate is an active process, requiring seeking of knowledge from multiple sources rather than passively receiving and repeating back facts, the teacher's role must evolve from the giver of knowledge into being a coach or guide (Wisconsin Educational Media Association, 1993). Teachers, professors, teaching assistants, librarians, administrators and the community must collaborate to find ways to involve the students not only in using classroom materials but also in using resources from the broader community and the mass media. (Humes, Barbara (2002). Lenox (1993) asserts that teachers must be ready to teach students to become critical thinkers, intellectual curious observers, creators and users of information. This is to equip and prepare students for an independent lifelong learning while utilizing the skills acquired to seek needed information.

Educators and researchers must grapple with defining the standards and competencies associated with information literacy; develop effective new ways to engage learners and measure the outcome and impact of such learning. Efforts along these lines are being conducted (Cotorado Educational Association, 1994).

Goal (2000) cited Doyle (1994) on the need for restructuring the learning process to reflect the imperatives of the new information age characterized by interactivity, self-initiated learning was highlighted by the ALA Presidential Committee on "Information literacy (ALA, 2009). This new process calls for a departure from the teacher centred teaching and learning style to more inclusive and participatory method that tasks the students' information literacy skills.

Students' Information Literacy Search Skills

Students' lack of information research skills is one of the contributory factors to the need to expand library instruction. Oberman (1991) addressed this in her study on American students, whereby their inability to match subject relevance with appropriate sources of information and their unfamiliarity with the online environment led to an information excess that caused considerable amount of anxiety. Candy (2002) links information anxiety with the impact of information explosion, or data smog, which Bruce (2002) associates with poor information literacy competences, as learners cannot find the information they need thereby rely on others for its retrieval. Lack of information literacy skills is a global phenomenon. Hepworth's study on undergraduates in Singapore found that students were unable to formulate a search effectively as they tended to make a very literal interpretation of the question and started looking for materials that mention those words listed in the question (Hepworth, 1999).

Importance of Information Literacy Skills

Knowledge is power as the saying goes, this is very true because it is what we know that determines what we can do or cannot do. What we know determines whether we succeed or fail. The knowledge we possess can make or mar our destinies. This is why we make deliberate effort to learn and know whatever there is to know. We learn and become knowledgeable only if we possess the necessary information literacy skills that enable us acquire information when there is a need for it, search, locate and gather quality information. Information literacy skills are necessary for our daily living, a successful career life, as well as a successful educational pursuit. With information literacy skills, acquiring information on any issue of life become stress less. There is no subject under the sun that cannot be learnt once an individual possess these skills.

Knowledge therefore becomes power when we are able to acquire information and effectively utilize it to meet our needs. According to Rockman, Ilene F (2003) information literacy is no longer just a library issue. It is *the* critical campus wide issue for the twenty-first century. It is of utmost importance to all stakeholders in the education sector, including administrators, faculty, librarians, media and information technologists, assessment coordinators, faculty development directors, service learning specialists, student affairs personnel, and career development professionals. The knowledge of information literacy is even more critical in this age where knowledge is ever increasing. The advent of Information and Communication Technologies evolved an increasingly complex world of abundance of information sources e.g. —print, electronic, image, spatial, sound, visual, and numeric. The issue is no longer one of not having enough information; it is just the opposite—too much information, in various formats and not all of equal value (Rockman, 2003). The present information environment holds many pitfalls for college and university students that seem to multiply geometrically (Roth, 1999). The challenge of educators according to Boyer (1997) is to help students make sense of a world described as information overload. Boyer commission on educating undergraduates in research noted that "undergraduate education should be designed as a continuum that prepares students' for continued learning and professional work through development of their talents to formulate questions and seek answers" (Boyer Commission on Educating Undergraduates in Research University, 2001). A sound foundation in information literacy knowledge helps students master the skill of searching, finding and effectively utilize information for purposes of school term papers, project and research articles.

Methodology

The methodology used in this research is descriptive survey. Four hundred (400) copies of questionnaires were randomly distributed to students across all levels of the five private universities in Ogun State, Nigeria. Research assistants were engaged in administering the questionnaire to respondents in the selected institutions. The investigation focused on students' knowledge of information literacy skills and utilization of these skills by students in all the five institutions. Due to high cost of printing, photocopying, distribution of questionnaires, and the engagement of research assistants, a manageable sample of 400 respondents was used for the study, leaving 80 respondents to each university. Only 300 level students were considered in the survey. The age limit for participation was pegged at 16 years and above, because that also represents the minimum age requirement for entering the Nigerian university system.

Data Analysis

Table 1: Frequency Distribution of Age of Respondents

AGE	FREQUENCY	PERCETAGES
16-21	207	57.7
22-27	152	42.3
TOTAL	359	100.0

Table 1 showed that the age bracket of the respondents ranged from between 16 and 27. This is expected as the population is 300-level undergraduate students of the various universities.

Table 2: Frequency Distribution of Sex of Respondents

SEX	FREQUENCY	PERCETAGES
MALE	166	46.24
FEMALE	193	53.76
TOTAL	359	100.00

Table 2 revealed that the female respondents were slightly more than their male counterparts. It appears there is a higher female enrolment than males, in these private universities as regards the set under study. However, the ratio indicates a fair and balanced gender sensitivity.

Table 3: Frequency Distribution of Selected Institution

	BABCOCK UNIVERSITY	THE BELLS UNIVERSITY	COVENANT UNIVERSITY	CRAWFORD UNIVERSITY	REDEEMER UNIVERSITY	TOTAL
FREQUENCY	72/80	80/80	80/80	69/80	58/80	359/400

PERCENTAGES	90	100	100	86.25	72.5	448.75/500

Table 3 indicated that Covenant University and Bells University recorded hundred percent response rate, followed by Babcock and Crawford Universities. The 100% response could be attributable to the close proximity of the institutions to the researchers thereby enriching total retrieval and monitoring.

TABLE 4: Using Databases to Search for Journal Articles

To find journal articles about "the popularity of video games", which of these will you search?

	FREQUENCIES	PERCENTAGE
The Lib. Catalogue	228	63.51
A Database	44	12.26
Google	69	19.22
The Journals in the Lib.	18	5.01
Total	359	100.00

The analysis in table 1 shows that most respondents do not know the best source of journal articles from the options listed on the table above, which is the database. Majority however, picked the library catalogue as their source of articles.

TABLE 5: Using Library Catalogue to Search for Titles

You have used the words "Business Letters" in a library Catalogue search. No document is found by the search. What do you conclude?		
	FREQUENCES	PERCENTAGE
The library does not have any documents on this topic	15	4.18
You have not used the right words	88	24.51
All documents on this topic are already on loan	225	62.67
The system is down	31	8.64
Others		
Total	359	100.00

The analysis in table 2 reveals that 62.67% of respondents concluded that the document was on loan when a catalogue search was carried out instead of concluding that the searcher had not used the right words.

TABLE 6: Using Encyclopaedia to Search and Learn More about a Subject

To become familiar with a subject of you know very little, which of these will you consult?		
	FREQUENCES	PERCENTAGE
A journal	64	17.83
An encyclopedia	168	46.79
A database	67	18.66
A book	36	10.03
Others	24	6.69
Total	359	100.00

The analysis above reveals that 46.79% of respondents affirmed the encyclopedia is the appropriate source for learning about a subject.

TABLE 7: Searching a Psychological databases by Combination of search Terms/Words

To use a psychology database to find information on "The effect of family relations on the academic results of primary school students" which combination of words will you use?		
	FREQUENCES	PERCENTAGE
Family relations, academic results, primary school	51	14.21
Family relations, academic results	162	45.13
Effects, family relations, academic results	32	9.01
Effects, family relations, academic results, primary school	101	28.13
Others	13	3.62
Total	359	100.00

From the responses of respondents in table 4, the correct search combination on
"The effect of family relations on the academic results of primary school students" is family
Relations, academic results, and primary school. However, most of the respondents opted for family relations, academic results i.e. 45.13% of the students picked this option.

TABLE 8: Locating Library Books through Google/Yahoo

Using a search engine such as Google or Yahoo , you would not find:		
	FREQUENCES	PERCENTAGE
The books available in the library	100	27.86
Biographical information about people	79	22.01
Merchandise catalogues	41	11.42
Information about companies	73	20.33
Others	66	18.38
Total	359	100.00

The responses of respondents in table 5 shows that students do not know that library books cannot be located through Google/yahoo search engines. Only 27.86% of the respondents picked the right option.

TABLE 9: Using the Catalogue to Search for available Articles in the Library

A friend told you that you should read an article published in the November 2011 issue of internet Guide, "The Microsoft Xbox console" by Mark Kenny. To check the availability of this article at the library, you search on the catalogue under:	FREQUENCES	PERCENTAGE
Internet Guide	42	11.70
Mark Kenny	48	13.37
The Microsoft Xbox Console	54	15.04
Internet guide, Mark Kenny, and Microsoft Xbox Console are correct	146	40.67
Others	69	19.22
Total	359	100.00

Table six 6 that 146(40.67%) of the respondents picked internet guide, Mark Kenny, and Xbox Console as an option in addition to the fact that it is the right choice.

TABLE 10: Using the Bibliography of a Book as a Guide for Locating Documents on any topic/subject

You have found a book that is right on your topic. Which section of the book will you consult to find other document on the topic?	FREQUENCES	PERCENTAGE
The glossary	132	36.77
The index	95	26.46
The bibliography	28	7.80
The table of contents	79	22.01
Others	25	6.96
Total	359	100.00

Table 7 analysis showed that 36.77% majority of respondents picked glossary as the book guide for locating other documents on a topic/subjects, even though this option is wrong. Only 7.80% of respondents picked the right option (bibliography).

DISCUSSION

The study revealed that the preponderance of respondents from the five private universities have low level knowledge of information literacy and search skills. This presupposes an impediment to accessibility and utilization of available library resources. Most of the private universities are

reputed to have plethora of modern information resources and elitist student population. It was anticipated that those would put them on advantageous position in relation to their public university counterparts. However, the information literacy skills, students may continue to underutilize library resources, resulting in colossal waste with potentially repercussions for their intellectual development and academic performance.

Only an insignificant few of 12.26% identified databases as a major source for accessing journal articles. Retrieval capabilities are enriched and enhanced by familiarity with information sources. Since journals represent sources of latest and current trends in knowledge acquisition, inability to locate them is tantamount to denial of the state-of-the art education.

Respondents were asked what they would conclude if the document being sourced for could not be found after searching the library catalogue. 62.67% concluded that the document was on loan. A few representing 24.51% maintained that the "right words "were not used for the search. Library catalogues are usually organized using globally acceptable controlled language or thesaurus terms. Ignorance of appropriate search terms leads to fruitless results, frustration and wrong judgments.

The study also focused on the capacity of the respondents to independently learn more of any given subject or topic. Learning more about a subject requires extensive reading of different information sources, especially an encyclopedia. Table 3 reveals that 46.79% of the respondents indicated encyclopedia as a source for learning more about a subject. This is less than average and a pointer to the fact that the students are not conversant with basic reference materials. Table 4 tested the appropriate search combination used to retrieve relevant literature on a research topic titled: "The effect of family relations on the academic results of primary school". A few of the

students representing 14.21% opted for "family relations, academic results, primary school". Majority (45.13%) opted for a wrong choice of "family relations, academic results". This search is of utmost importance when carrying out research involving multiple variables.

The study further revealed that most of the respondents are not aware that library books or collections cannot be adequately located through Google or Yahoo search Engines. Only 27.86% agreed that books available in the library cannot be retrieved using Google or yahoo. Similarly, 40.67% rightly identified Internet Guide, Mark Kenny, and Xbox-console as an option for retrieving an article titled: "The Microsoft Xbox console" by Mark Kenny published in the November issue of Internet Guide. In the same vein only 7.80% the respondents selected bibliography of a book as a guide for locating documents on any of the topics contained in the book. The above responses further accentuate the fact that the students have poor knowledge of literacy and search skills.

CONCLUSION

The students' responses from the five selected private universities revealed that students generally do not have good information literacy skills, while a few demonstrated marginal knowledge. Apart from 62.67% of students who understood that the right word may not have been used when searching the library catalogue for a particular title, other results showed that far less than half of the students responded to questionnaire items correctly and most appeared not sure about their responses. It seems they just filled the questionnaire because they had to. Consistently over half of the students were wrong in their responses to the questionnaire items. This is an indication that students are either lacking in the knowledge of information literacy skills, or that they have very little knowledge of information literacy skills and application. The

finding also portrays that students are not very familiar with the various information sources and the types of information obtainable from them. One or more reasons could be responsible for this ugly trend. Students may have never attended information literacy classes before, or that students may have attended classes occasionally and never paid close attention to what was taught in the classes. It is also possible that information literacy programmes in these institutions are more theory oriented rather than practical hands-on, thus engendering dexterity and mastery.

RECOMMENDATIONS

Information literacy skills should be integrated into the secondary and tertiary schools' curriculum to underscore the seriousness and utmost relevance of the programme. The implementation should transcend a mere theoretical delivery to a robust practical hands-on. There is need for an enhanced and continuous library user education geared towards empowering students to be sufficiently familiar with diverse information sources, format and peculiar characteristics. Mutual collaboration is required between teachers and librarians to ensure integrated participatory mode of lecture delivery which compels students to turn in researched assignments as well as adopt seminar presentations on some course outlines. The process of involving students to undertake researching and teaching part of the topics automatically provides experiential platform for cultivating requisite information literacy skills.

Library and information professionals must engage in constant advocacy and sensitization outreaches to promoting information literacy. It is about influencing the public to a realization that lifelong learning is crucial to leveraging with global change and innovation. There is a need to develop new skills and strategies to coping in an information age with its multifaceted learning opportunities and challenges.

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