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Challenges of information literacy skills of undergraduate students in Ajayi Crowther University, Oyo State Nigeria

*(Wyzwania związane z kompetencjami informacyjnymi studentów Uniwersytetu
Ajayi Crowther University w stanie Oyo w Nigerii)*

Słowa kluczowe: studenci, kompetencje informacyjne, źródła informacji.

Abstrakt: Edukacja informacyjna i źródłowa jest istotnym elementem służącym rozwijaniu podstawowych umiejętności studentów w zakresie wyszukiwania informacji, jej selekcji, krytycznej oceny i efektywnego wykorzystania. Przedmiot ten jest zazwyczaj realizowany dla studentów w bibliotekach w ramach upowszechniania modelu uczenia się przez całe życie. Studenci napotykają problemy w procesie przekazywania i przyswajania umiejętności nauczanych przez bibliotekarzy. W niniejszym artykule poddano analizie wyzwania związane z kształceniem kompetencji informacyjnych wśród studentów Uniwersytetu Ajayi Crowther. W tym celu wykorzystano kwestionariusz ankiety. W obliczeniach zastosowano metodę procentową. Na podstawie wyników badań wyciągnięto wnioski i sformułowano zalecenia dla bibliotekarzy dotyczące ustawicznego kształcenia studentów w zakresie edukacji informacyjnej i źródłowej. Wykazano, że proces ten pozwala poszerzyć kompetencje informacyjne studentów oraz odpowiednio wykorzystać zasoby biblioteki.

Keywords: Undergraduate students, Information literacy skills, Information resources.

Abstract: Information literacy programmes are important in developing students' basic skills which are needed for searching, retrieving, evaluating and effectively using information. This is often organized by the library to prepare undergraduate students for lifelong learning. However, students often encounter problems in the process of impartation dissemination and absorption of the skills being taught by librarians. This study examines the challenges of information literacy skills impartation dissemination by undergraduate students in Ajayi Crowther University. The descriptive survey research method was adopted. Data gathered was analysed using the frequency count and simple percentages. Conclusion and recommendations were drawn on how librarians should endeavour to continuously train undergraduates on a yearly basis as this will enhance better information literacy skills impartation and improve the usage of the library information resources.

Introduction

Information literacy competencies among students in tertiary institutions is the key for learning how to find and use information effectively. Sieving through diverse information which are in different formats in this present age of information explosion, poses a strong challenge to information seekers, especially undergraduate students. This is why information literacy programme plays a vital role in equipping library users with various skills needed to recognize and access authentic information. Undergraduate students seek information to be prepared for an independent long-life learning, while utilizing the skills which they acquire from the library information literacy programmes [1; 15; 16; 19; 20].

Bruce [6], defines information literacy as „the ability to access, evaluate, organize, and use information in order to learn, solve problems and make decisions – in formal and informal learning contexts, at work, at home and in educational settings”. Information literacy is generally seen as pivotal to the pursuit of lifelong learning, and central to achieving both personal empowerment and economic development. Also, information literacy is a natural extension of the concept of literacy in our information society, and information literacy education is the catalyst which is required in transforming the information society of today into the learning society of tomorrow. According to ACRL [2], information literacy is a set of abilities needed by a person to recognize when information is needed and he has the 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. According to this definition the students must demonstrate competencies in formulating research questions and in their ability to use information as well as an understanding of ethical and legal issues surrounding information.

Tella [25] avers that information literacy requires an in depth interpretation which encompasses the knowledge and cognitive processes as well as the practical skills required and necessary in this digital era where there is global acceleration of information technology. Gross and Latham [11] affirm that the quality of a university can be measured by the resources available in the institutional repository for learning and the extent to which students become independent self-directed learners. Apart from the availability of the information resources, an individual should be information literate.

Goad [10] also states that access to vital information by an individual can bring about great success if only it can be optimized effectively. Through information literacy skills individual student can be empowered to effectively manage and use information and thus become efficient learners. The library has the responsibility to teach students how to effectively use available information technologies and moreover, information literacy programmes which is acquisition of skills such as computer use skills, information search skills, library catalog search skills, etc. and how to access online databases in supporting educational mission of computer literacy. It is the ultimate goal of any library to ensure that the clientele

are able to access every available information materials in the library, such as electronic resources, printed journals, encyclopedias, dictionaries, guides for bibliographic initiation and other important information materials including treaties, literary texts, etc.

Series of information literacy programmes are being organized for undergraduate students by the library but yet, they lack necessary searching, evaluating and information handling skills. They seem not to be confident in themselves because they lack the mastery of information retrieval and use. Library resources are underutilized despite all the effort of the library to impart those skills in them. Therefore, the main focus of this paper is to investigate the challenges of impartation of information literacy skills of undergraduate students of Ajayi Crowther University, Oyo, Oyo State, Nigeria.

Objectives of the Study

The specific objectives of the study are to:

1. Determine the sources of the information available for undergraduate students in Ajayi Crowther University.
2. Assess students' knowledge of information search skills in Ajayi Crowther University.
3. Determine the information literacy skills possessed by undergraduate students in Ajayi Crowther University.
4. Investigate the challenges facing information literacy efforts of students in Ajayi Crowther University.

Research Questions

The study attempted to provide answers to the following questions:

1. What are the various sources of information available for undergraduate students?
2. What are the information search skills acquired by undergraduate students?
3. What are the information literacy skills possessed by undergraduate students?
4. What are the challenges confronting undergraduate students in their efforts to acquire basic information literacy skill?

Literature review

Usman [27] posits that people acquire and use knowledge because it is essential to improve their lives. Therefore, the skills for acquiring and using information become more important. According to Brown [5], information literacy is subsumed in a variety of skills and abilities including critical thinking, problem solving, social and personal communication skills, computer and library literacy. It is primarily rooted in the concept of library user education and bibliographic instruction. It is the ability to recognize when information is needed, ability to locate, evaluate and use effectively needed information.

Sasikala and Dhanraju [24] conclude from previous research on information literacy that students think they know more about accessing information and conducting library

research than they are able to demonstrate in practice. They lack the ability to 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 [3]. 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 [24].

Harris [12] maintains that information literacy is achieved by tutoring students over time through multiple information-seeking experiences. Information literacy is not a set of discrete, declarative skills that can be taught once and internalized by the learner, rather it has to be applied in a variety of situations. Success can be measured by students who can approach each new type of information problem with flexibility and resourcefulness. Rabin and Cardwell [21] demonstrate in a study that students who had taken another academic course with a basic information literacy component knew more than those who had not. A number of researchers [7; 8; 26] support the notion of integrated instruction by stating that information literacy should not be extraneous to the curriculum, but should be woven into its content, structure, and sequence.

Okon et al [19] opines in a study conducted on two universities, that the provision of necessary information resources and facilities in the library will help in the acquisition of information literacy skills by students but it has been observed over the years that library resources are under-utilized. Students need the skills to identify authentic information, analyse the constraints with information retrieval and generate creative ideas to solve emerging problems while searching the required information from vast array of information sources [17].

Tella [25] states that pertinent to add that with information literacy, students who are information literate will get more out of their time at school. Students with well-developed information literacy skills will be better able to perform research, to evaluate the results of their search for material and data and so more able to decide on the steps to take next. Their contributions to seminars and tutorials should improve as should their written work and its presentation. An information literate student should be a more independent learner: less reliant upon his or her tutor for support. It is not an understatement to say that such students will naturally make themselves more employable once they leave the school. They will also better equip themselves for living in the 21st century.

Peacock [20] argues that the role of librarians in every library is changing as they seek to devise, develop and implement strategies and systems which embed information literacy in the curriculum. Rader [22] observes 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. Lichtenstein [16] 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.

Lenox [15] notes that students should be taught different information skills in order 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 [9].

Varlejs and Stec [28] find out that from a research conducted for students in New Jersey that majority of the respondents claimed not to have adequate information literacy instruction while some did not even absorb what their library teach them. They observed lack of connections between information literacy skills they have acquired and the application of the skill. According to Braimoh, Jegede and Chadzinwa [4] the consequences of the students inability to use the library will include among other things, a serious debasement of quality of university education, which may consequently have a negative effect on the job performance of the university products. A great deal of effort is being made to assist fresh undergraduates (the incoming new students) into the university in the use of library resources. The attempt which includes introduction of user education is to build good library culture into the students, right from the foundation of their university education.

From previous researches, it has been observed that in spite of all the efforts put together by librarians, undergraduates still find it very difficult to master the art of information retrieval and use [13; 28] while researching on challenges facing information literacy efforts in Kenya, observed that students in some selected Kenyan universities are unable to develop computer skills needed to search for information because of shortage of personnel to provide IT training. It was emphasized that some librarians find it hard to effectively train students the use of information sources available for them in the library. Librarians are to equip undergraduates with necessary skills such as search skills, evaluation skills, referencing skills, etc. This will be hard to do if they themselves do not have adequate knowledge of the skills [23]. In the same vein, computer literacy, library skills, searching skills, and other „background” abilities such as assessing the quality of sources, thinking critically about information, and having an awareness of the legal and ethical issues related to information use are largely absent whether they are being overlooked or assumed.

However, it was observed that students do not have mastery of information literacy skills because of inadequate skills possessed by some librarians. Leckie [14], in a study observed that, librarians do not understand their role or expectations very well. Certainly, one recurring challenge faced by instructional librarians is gaining access to the very students that they are tasked with educating. Librarians can ascertain the level of information literacy skills of every fresh undergraduate student by organizing information literacy test for them. This will possibly assist in identifying the needs of each of them and get them tutored accordingly.

Research methodology

The research design for this study was the descriptive research. The study was designed to investigate the challenges of information literacy skills impartation among undergraduate students in Ajayi Crowther University, Oyo, Oyo State Nigeria, hence the appropriateness of descriptive design. Questionnaire was designed to collect required data from the respondents. A sample of one hundred and three (103) students from the five (5) faculties who are regular users of the library participated in the study. This is to ascertain whether they really have the knowledge and mastery of information access and retrieval processes. The distribution of the respondents is presented below.

Data analysis

Table 1. Distribution of respondents

Gender	No. of Respondents	Percentage
Male	41	39.8%
Female	62	60.2%
Total	103	100%

Source: own elaboration.

Table 1 shows that majority of the respondents are female.

Table 2. Distribution of respondents by level of study

Level	No. of Respondents	Percentage
100	49	47.6%
200	12	11.7%
300	18	17.5%
400	24	23.3%
Total	103	100%

Source: own elaboration.

Table 2 shows that majority of the respondents are year one students with 47.6%.

Table 3. Distribution of respondents by faculty

Faculty	No. of Respondents	Percentage
Humanities	12	11.7%
Law	20	19.4%
Management Sciences	12	11.7%
Natural Sciences	22	21.4%
Social Sciences	37	36%
Total	103	100%

Source: own elaboration.

Table 3 shows that majority of the respondents are students from Faculty of Social Sciences with 36%.

Research Question 1: To determine the source of information available for undergraduate students in Ajayi Crowther University.

Table 4. Students' responses on the various sources of information available for the undergraduate students

S/N	Items available	Responses	
		Yes (%)	No (%)
1.	Textbooks	103 (100%)	0
2.	Journals	97 (94.2%)	6 (5.8%)
3.	Magazines	91 (88.3%)	12 (11.7%)
4.	Newspapers	77 (74.8%)	26 (25.2%)
5.	Newspaper clippings	73 (70.9%)	30 (29.1%)
6.	Special Collections/Government Publications	73 (70.9%)	30 (29.1%)
7.	Students Long Essay (Projects)	73 (70.9%)	30 (29.1%)
8.	Electronic Online Resources	97 (94.2%)	6 (5.8%)
9.	Resources materials (e.g. dictionary, encyclopedia, yearbooks etc.	97 (94.2%)	6 (5.8%)
10.	Map/Globe/Atlas etc.	78 (75.7%)	25 (24.3%)
11.	Microfilms and microfiches	5 (4.9%)	98 (95.1%)
12.	CD-ROM	4 (3.9%)	99 (96.1%)

Source: own elaboration.

According to the result, all of the respondents in the sample have access to textbooks, fewer students have access to magazines and journals while the lowest number of students have access to electronic sources. Therefore, printed sources are still the most readily available

sources of information to students, despite the growing dependence on the internet and electronic sources, students still find printed sources more reliable source of information.

Research Question 2: To assess students' knowledge of information search skills in Ajayi Crowther University.

Table 5. Showing students' responses on the information search skills acquired by undergraduate students

S/N	Question	Responses				Weighted Mean (%)
		Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	
1.	As an individual, I can use truncation search techniques	24 (23.3%)	30 (29.1%)	42 (40.8%)	7 (6.8%)	45%
2.	I can use Boolean search techniques	23 (22.3%)	23 (22.3%)	54 (52.4%)	3 (2.9%)	34%
3.	As a student, I have the ability to choose materials on topics taking into account accuracy	23 (22.3%)	65 (63.1%)	15 (14.6%)	0 (0%)	33%
4.	I can limit online search by fields	22 (21.4%)	48 (46.6%)	29 (28.2%)	4 (3.9%)	35%
5.	I can use mailing list to obtain and exchange information	25 (24.3%)	37 (35.9%)	38 (36.9%)	3 (2.9%)	36%
6.	I can use discussion groups to obtain and exchange information	47 (45.6%)	41 (39.8%)	7 (6.8%)	8 (7.8%)	31%
7.	As a student, I can use library catalogue and have understanding of everyday online search tools	29 (28.2%)	51 (49.5%)	19 (18.4%)	4 (3.9%)	33%
8.	As an individual, I understand the need to use appropriate search tools	44 (42.7%)	56 (54.4%)	1 (1%)	2 (1.9%)	30%
9.	I am able to access sources of information including computer based and other technologies	30 (29.1%)	44 (42.7%)	24 (23.3%)	5 (4.9%)	34%
10.	I have the ability to select materials and summarize in my own words for my use	43 (41.7%)	52 (50.5%)	5 (4.9%)	3 (2.9%)	30%

Source: own elaboration.

According to the results, a greater number of students do not know how to use this research information search skill. Here, the implication is that less than the median score of 114.5 (using second quartile) responded positively to the question. It was observed that about 45%, 34% and 33% are familiar with the truncation search skill, Boolean search skill

and account accuracy respectively. Meaning that the truncation techniques is underutilized by 56% of the remaining students probably because they lack the necessary knowledge needed. Other methods have similar values as well, the highest being the truncation skill.

Research Question 3: To determine the information literacy skills possessed by undergraduate students in Ajayi Crowther University.

Table 6. Responses on information literacy skills possessed by the undergraduate students

S/N	Question	Responses				Weighted mean (%)
		Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	
1.	I can clearly define concepts of a topic	49 (47.6%)	50 (48.5%)	3 (2.9%)	1 (1.0%)	29%
2.	As a student, I understand the need to use information to undertake everyday task	63 (61.2%)	35 (34%)	5 (4.9%)	0 (0%)	28%
3.	I can recognize that background information helps to achieve focus on a chosen topic	46 (44.7%)	53 (51.5%)	1 (1%)	3 (2.9%)	30%
4.	I have ability to use several reference sources to increase familiarity with a topic	37 (35.9%)	59 (57.3%)	4 (3.9%)	3 (2.9%)	31%
5.	As an individual, I am able to define my specific information needs	62 (60.2%)	39 (37.8%)	2 (1.9%)	0 (0%)	28%
6.	I understand the nature of information freely available on the internet	44 (42.7%)	51 (49.5%)	7 (6.8%)	1 (1%)	30%
7.	I have ability to take notes from print and electronic source by printing or saving to disk	45 (43.7%)	44 (42.7%)	10 (9.7%)	4 (3.9%)	31%
8.	As a student, I am able to recognize accurate and complete information as the basis for intelligent decision making	47 (45.6%)	53 (51.5%)	1 (1%)	2 (1.9%)	30%
9.	I am able to use information in critical thinking and problem solving	41 (39.8%)	53 (51.5%)	9 (8.7%)	0 (0%)	31%
10.	I can competently evaluate information no matter what the source	34 (33%)	56 (54.4%)	10 (9.7%)	1 (1%)	31%

Source: own elaboration.

An average of 31% of the respondents possess information literacy skills, these include ability to use several reference sources, ability to take notes from prints/electronic sources and ability to evaluate information from the source. Most of the students on the other

hand aren't able to define specific information and to understand the use of information in everyday tasks.

Research Question 4: To investigate the challenges facing information literacy efforts of students in Ajayi Crowther University.

Table 7. Showing responses on the challenges confronting undergraduate students in their efforts to acquire basic information literacy skills

S/N	Question	Responses				Weighted Mean (%)
		Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	
1.	Time restrictions due to other responsibilities and activities	60 (58.3%)	21 (20.4%)	16 (15.5%)	6 (5.8%)	30%
2.	I don't have time for library training	4 (3.9%)	31 (30.1%)	24 (23.3%)	44 (42.7%)	52%
3.	I need to learn more about information resources in my discipline	31 (30.1%)	41 (39.8%)	23 (22.3%)	8 (7.8%)	34%
4.	I don't like the time limits imposed by the library on how long I can use the computer	39 (37.9%)	37 (35.9%)	12 (11.7%)	15 (14.6%)	34%
5.	Requirement to use passwords and user identities is a discouragement	22 (21.4%)	19 (18.4%)	31 (30.1%)	31 (30.1%)	42%
6.	Librarians have limited conception of information literacy	22 (21.4%)	36 (35.0%)	30 (29.1%)	22 (21.4%)	37%
7.	I use online databases relevant to my area of study	34 (33%)	40 (38.8%)	15 (14.6%)	13 (12.6%)	34%
8.	I lack basic computer skills (word processing e.g. typing, saving files etc.)	4 (3.9%)	19 (18.4%)	23 (22.3%)	57 (55.3%)	59%
9.	I find it difficult to apply what I have learnt as a lifelong skill	12 (11.7%)	21 (20.4%)	34 (33%)	36 (35%)	48%
10.	Downloading speed is too slow	41 (39.8%)	26 (25.2%)	18 (17.5%)	18 (17.5%)	35%

Source: own elaboration.

The biggest challenge is the lack of information on basic computer skills like word processing, a whopping 59% of undergraduate students cannot use basic computer skills. Furthermore, almost half of the students (48%) find it difficult to apply what has been learn in a lifelong skill acquisition practice. Most students however admit that time is not a major challenge for studying and researching, however time for library training is a challenge affecting 52% of students.

Discussion of findings

The findings of this study reveal that the library has made provision for several sources of information through which information needs of every students can be met. The library gives access to all the information in different formats, but it is revealed further that despite the growing dependence on the internet and electronic sources, undergraduate students still find printed sources more reliable. Availability of information in electronic format does not necessarily mean actual use because the users may not be aware of the availability of such resources, they do not know how to access these resources, or do not know what the resources offer. Library users should be empowered and adequately equipped with necessary information search and retrieval skills in order to satisfy their information needs. Poor information skills is the basic reason for their inability to effectively search information in all formats. Training in the use of computer and knowledge of e-resources can impact information seeking behavior and empower users to have understanding about effective use of information independently.

This study also reveals that a great number of students lack the knowledge and mastery of information search skills. It was observed that about 45%, 34% and 33% are familiar with the truncation search skill, Boolean search skill and evaluation of materials on topics. This is because they lack the necessary knowledge of skills needed. Information literacy requires more skills than mere having access to and knowledge of how to use various technologies and searching through an online catalog or other reference materials. This makes it a goal-oriented skill for students. This finding also concurs with Sasikala and Dhanraju [24] conclude from previous research on information literacy that students think they know more about accessing information and how to conduct library search than they are able to demonstrate in practice. They lack the ability to know when information is needed, how to recognize good sources of information, how to locate relevant information, use and communicate it effectively.

The findings of this study also reveal that an average of 31% of the respondents possess information literacy skills which implies that 69% of the respondents do not possess the adequate information literacy skills needed for life-long learning.

This study reveals the challenges of impartation of information literacy skills among undergraduate students. This includes; lack of information on basic computer skills like word processing, a whopping 59% of undergraduate students cannot use basic computer skills. Furthermore, almost half of the students (48%) find it difficult to apply what has been learnt in a lifelong skill acquisition practice. Most students however admit that time is not a major challenge for studying and researching, however time for library training is a challenge affecting 52% of students. Some authors reported that even though series of information literacy programmes are being organized for undergraduate students by the library but yet, they lack necessary searching, evaluating and information handling skills. They seem not to be confident in themselves because they lack the mastery of information retrieval and use. Library resources are underutilized despite all the effort of the library to impart those skills in them.

Conclusion and recommendations

The research has shown that students lack basic information search skills despite the library's efforts in imparting various skills in them. Also, the result shows that despite the fact that the library is well-stocked with various information resources, students are not still adequately accessing electronic resources. Although, the library has always welcomed new changes in a bid to enhance its services and also to satisfy clientele's needs but there is need to change their approach as the availability of the electronic resources is growing day by day. Necessary facilities that will encourage the students to make use of online resources should be put in place. The internet bandwidth can be improved upon and the number of computer systems should be increased so as not to be timing the users whenever they come to surf the net or access library electronic resources. Libraries should therefore endeavour to make information literacy skill training mandatory for all students so that resources available can be put to maximum and effective use. Librarians should improve on their skills and ensure continuous training process so as to have a better grasp and solid impartation of information literacy skills.

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