Information Literacy Skills of Undergraduates in Paul University Awka, Anambra State

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Abstract
This study appraised the information literacy skills of undergraduates in Paul University Awka. Descriptive survey was adopted. Population comprised 283 undergraduates of the University out of which, 60 were selected through proportionate stratified random samplingtechnique. The study was guided by four research questions. Two-in-one instrument – achievement test and questionnaire were used for data collection. Data were analyzed using simple percentages, frequency counts, and mean ratings. Findings revealed that the undergraduatesin Paul University, Awka possess all the skill sets of information literacy covered by the study hence, average percentage scores of 89%, 72%, 79%, and 75% respectively on the ACRL's Information Literacy Standards 1, 2, 3, and 5. It further revealed that the undergraduates have positive attitude towards information literacy although they face some challenges regarding skill acquisition. Strategies to be explored to improve the students' information literacy skills were also highlighted. Major recommendations include development of information literacy policy, and integration of information literacy programme in the University's curriculum.

Keywords: Information Literacy, Undergraduates, University Libraries, Paul University Awka.

Introduction
Information deluge is one of the striking features of this 21st Century– technology-driven era. This phenomenon commonly described as 'information explosion' is greatly

encouraged by advances in Information and Communication Technologies (ICTs) and their application in information production and dissemination. This has invariably posed undergraduates with enormous information literacy challenges in the course of their scholarship. Possessing skills of "defining and articulating the nature and extent of information needed, accessing needed information effectively and efficiently, evaluating information and its sources critically and incorporating selected information into ones knowledge base and value system, using information effectively to accomplish a specific purpose, and understanding the ethical, legal, social, and economic issues surrounding the use of information and information technology" (Association of College and Research Libraries, 2000) thus become very critical among undergraduates. This is because information literacy "is a vital part of university education" (ACRL, 2007).

Information literacy is a vital issue in academic spheres globally and will always remain an important skill for students in higher education (Singh, 2014). Oftentimes, undergraduates erroneously believe that once they are ICT-compliant, they are information literate. In reality however, majority of university undergraduates actually lack information literacy skills as multiple recent studies have revealed. Oyedepo once emphasized: "A university is a place where solutions to societal problems are found and value added to humanity" (Oyedepo, 2012). These can only be achieved through information-literate workforce. For the university to live up to this expectation, it must equip undergraduates accordingly. This is why Duncan and Varcoe, (2012) highlighted: "Information Literacy skills development is not only beneficial to students while in school, but also as they enter the workforce."It behooves the university to develop information literacy policy, incorporate this into students' curriculum, and provide enabling environment and necessary facilities for information literacy to thrive.

Nowadays, most undergraduates seem to be deficient in research-related tasks due to lack of information literacy competency, which is necessary for effective use of information resources. Baro and Fynemanin Baro and Zuokemefa (2011) hence lamented: "most students in Nigerian universities have been found to lack the sophisticated skills that are needed to exploit the university libraries' information resources both print and online". This deficiency often leads to fraudulent practices of hiring mercenaries for research-based activities like assignments, term papers, and research reports. It also encourages 'copy and paste' syndrome largely supported by modern technologies. This is very common in some private universities where merit is seemingly compromised while scrambling for freshers. This is quite alarming as scholarship and research culture are jeopardized in the contemporary university education system. This necessitates an appraisal of information literacy skills of undergraduates in Paul University Awka.

Background of the University

Paul University Awka is a faith-based Anglican University established in November 3, 2009 by the five Ecclesiastical Provinces (55 dioceses of the Anglican Communion East of the Niger). The University took-off at the former St. Paul's University College, Awka, which was established by the Church Missionary Society (C.M.S.) in the year 1904. Currently Paul University offers twenty-six courses which are domiciled in three faculties - Arts, Management /Social Sciences, Natural and Applied Sciences. As at the time of this study, it had a population of two hundred and eighty-three undergraduates.

Purpose of the Study

The purpose of this study is to assess the information literacy skills of undergraduates in Paul University, Awka. Specifically, the study is aimed at:

1. determining the information literacy skills possessed by the undergraduates in Paul University, Awka;
2. ascertaining the attitude of the undergraduates in Paul University, Awka towards information literacy;
3. finding out challenges undergraduates of the University face with regards to information literacy skills acquisition;
4. suggesting strategies for improving the information literacy skills of undergraduates in Paul University, Awka.

Research Questions

The following research questions were posed to guide this study:

1. What are the information literacy skills possessed by the undergraduates in Paul University, Awka?
2. What is the attitude of the undergraduates in Paul University, Awka towards information literacy?
3. What constitute challenges faced by the undergraduates with regards to information literacy?
4. What are the strategies for improving the information literacy skills of the undergraduates in Paul University, Awka?

Review of Related Literature

The concept 'Information Literacy' which has somewhat superseded such precursors as bibliographic instruction, user education, library orientation, library skill instruction, etc. has attracted a prolonged debate among information experts regarding what to be captured in the definition. Some schools of thought noted that it should be considered as 'information-related competencies' instead of 'information literacy'. There were also opinions like 'information competency' and 'information fluency', hence, there were divergent views. Consequently, Campbell (2004) lamented: “so much efforts and ink

have been dedicated to defining this term thatOwusu-Ansah (2003) has suggested calling a halt to defining the term and just getting on with the business of doing information literacy".

However, a plethora of definitions have emerged from various information experts. The popular and generally-accepted definitions was put forward by the ACRL in the year 2000, which perceived information literacy as "a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." This definition, according to Murray (2008) provided the basis for subsequent discussions of this term. Information literacy, as was revealed by Murray, came to lightin the 70s"as awareness grew that information was becoming an overwhelmingly and unimaginable deluge." However, this definition was modified by the ACRL (2016)as: "set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning." This expanded definition was offered "to emphasize information dynamism, flexibility, individual growth, and community learning" (ACRL, 2016). According to Virkus (2014), the term was invented by Zurkowski(1974), who perceived an information-literate person as "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."

Experts have developed different standards and models to illustrate the attributes of an information-literate individual. These have served as models for information literacy appraisal in higher education. Some examples of such include: Information Literacy Competencies Standards for Higher Education (ACRL, 2000), SCONUL's (2011) Seven Pillars of Information Literacy Model, Big Six Information Literacy Skill Model by Eisenberg and Berkowitz (1990), Doyle's (1992) Attribute of Information Literate Person.

A great correlation has been established between undergraduates' skill level and attitudes towards information literacy. Students with positive attitude towards information literacy are more information-literate than oneswith negative attitude. This was substantiated by Ogunlana, Oshinaike, Akinbode, and Okunoye (2013)who established that students' perception, attitude and experience significantly correlate with information literacy skills. **Reetseng** (2016) assessed the attitudes of undergraduate students towards information literacy training and wrote: "students confirmed that the training programme was indeed valuable and required for various aspects of their life, studies and career."

Researchers have identified challenges to undergraduate students' information literacy skills acquisition. Singh (2014) lamented on the absence of formal channels for undergraduates to learn the skills. Singh decried that most students acquire these skills

either by trial and error or through guidance from other students on their own. Baro and Zuokemefa (2011) complained that information literacy has not been accorded its position in the higher education curricular in Africa. In most African universities, librarians who occupy the frontlines of information literacy promotion crusade are still engrossed in precursors like 'use of library', 'user instruction', 'bibliographic instruction' even in the face of change and modern technologies. Rekha (2009) hence lamented: "it is always difficult to change the mindset of the people (school authorities, faculty members, students, and the Library and Information Science professionals) to accept new things." **In a study conducted by Reetseng** (2016), some of the challenges identified include student's difficulty in acquiring new skills as they lack basic library and computer skills, scope of training and time-relatedissues.

Multiple studies have suggested ways of improving information literacy skills of undergraduates. For instance, Singh (2014) suggested integration of information literacy programme in the curriculum. Syamalamba (2011) recommended regular evaluation of the information literacy skills of first-year undergraduates upon entrance to college; successful completion of a test to measure information literacy competencies during the student's first year of studies, and incorporation of information literacy instruction into academic programmes at the undergraduate and graduate levels. Bruce (2002) emphasized the need of having an information literacy policy in order to implement the programmes effectively. Baro and Zuokemefa (2011) advised that the GST course contents need to be updated to include information literacy skills. Ogunlana,*et al.* (2013) recommended that information skill and knowledge should be part of the curriculum and should be made compulsory for all students.

Method

The study is a descriptive survey. Achievement test and a structured questionnaire were used for data collection. The instrument was divided into two parts: 1 and 2. Section A of Part 1 was aimed at capturing the demographic data of the respondents, while Section B contained 25 objective questions on Information Literacy. Part 2 (the questionnaire) was partitioned into Sections A, B, and C which covered students' attitude towards information literacy, challenges to information literacy skills acquisition, and ways of improving the information literacy skills of the students respectively. The test was designed in agreement with the ACRL's (2000) Information Literacy Competency Standards for Higher Education. However, Standard Four which centered on "effective use of information to accomplish a specific purpose" was not amenable to objective question format hence, not covered by the achievement test.

Proportionate stratified random sampling was used to draw a sample of 60 respondents

from the population (283). Data collected were analyzed using percentages and mean rating. Since the research question 1 is meant to find out information literacy skills the undergraduates possessed, the researcher first determined the number of respondents that passed each question and converted the result to percentage. Mean rating was used to answer research questions 2, 3, and 4. As a decision rule for research question 1, if the percentage result was 50% and above, it was given a positive interpretation (possessed). If it was below 50%, it was given a negative interpretation (not possessed). For research question 2, 3, and 4, mean scores of 2.50 and above were given positive interpretation (Agreed), while mean scores below 2.50 were given negative interpretation (disagreed).

Findings

Table 1: ***Response Rate***

		Number of Questionnaires		
S/N	**Academic Level**	**Administered**	**Retrieved**	**Percentage%**
1.	100 Level	24	24	100
2.	200 Level	14	14	100
3.	300 Level	11	11	100
4.	400 Level	11	11	100
	Total	**60**	**60**	**100**

Table 1 shows the response rates of the respondents across the four academic levels (Level 1 to Level 4). The Table shows that the questionnaire attracted one hundred percent response from the respondent.

Table 2: ***Demographic Characteristics of the Respondents***

S/N	Variables	Frequency	Percentage%
1.	**Gender**		
	Male	24	40
	Female	36	60
	Total	**60**	**100**
2.	**Academic Level**		
	Level 1	21	35
	Level 2	15	25
	Level 3	12	20
	Level 4	12	20
	Total	**60**	**100**

3.	**Age**		
	15 – 20	36	60
	21 – 25	22	37
	26 – 30	2	3
	31 – 35	-	-
	Total	**60**	**100**
4.	**Faculty**		
	Arts	11	18
	Management & Social Sciences	24	40
	Natural & Applied Sciences	25	42
		60	**100**

Table 2 shows that majority of the respondents, 36 (60%) were females, while 24 (40%) were males. Also, majority, 21 (35%) were 100 Level students, 15 (25%) were 200 Level students, 12 (20%) were 300 Level students, and 12 (20%) 400 Level students. Regarding age distribution, 36 (60%) were aged between 15 and 20 years, 22 (37%) were aged between 21 and 25 years, while 2 (3%) were aged between 31 and 35 years. Table 2 also shows that 25 (42%) were from the Faculty of Natural and Applied Science. 24 (40%) were from the Faculty of Management and Social Sciences, while 11 (18%) were form the Faculty of Arts.

Research Question 1: What are the information literacy skills possessed by the undergraduates in Paul University, Awka?

Table 3:*Students' response to information literacy skills test*

Test Questions	**Frequency (No. of respondents that passed the Test)**	**Percentage (%) Scores**	**Decision**
	Defining and Articulating the Nature of Information Needed		
Question 1.	41	68	
Question 2.	57	95	
Question 3.	60	100	
Question 4.	50	83	

Question 5.	59	98	
	Average Percentage	**89**	**Possessed**
	Accessing the Needed Information Effectively and Efficiently		
Question 6.	57	95	
Question 7.	35	58	
Question 8.	30	50	
Question 9.	34	57	
Question 10.	53	88	
Question 11.	34	57	
Question 12.	59	98	
Question 13.	51	85	
Question 14.	32	53	
Question 15.	33	55	
Question 16.	55	92	
Question 17.	49	82	
Question 18.	48	80	
Question 19.	36	60	
	Average Percentage	**72**	**Possessed**
	Evaluating Information and its Sources Critically		
Question 20.	46	77	
Question 21.	52	87	
	Average percentage	**79**	**Possessed**
	Understanding many of the Ethical, Legal, and Socio-economic Issues Surrounding Info. & Info. Tech.		
Question 22.	53	88	
Question 23.	51	85	
Question 24.	52	87	
Question 25.	23	38	
	Average Percentage	**75**	**Possessed**

Table 3 shows the performances of the students in the 25 objective test questions. Questions 1-5 centered on skills in defining and articulating the nature and extent of information needed. Percentage scores ranged from 68-100 with an average percentage score of 89%. This is an indication that the students possess the skill of defining and articulating the nature and extent of information needed. Questions 6-19 centered on skills in accessing the needed information effectively and efficiently. Percentage scores ranged from 50-98 with an average percentage score of 72%. This revealed that the students possess the skill of accessing the needed information effectively and efficiently. Questions 20-21 covered skills in evaluating information and

its sources critically. Percentage scores were 77 and 87 with an average score of 79%. This pointed out that the students possess the skills required in evaluating information and its sources critically. Questions 22-25 captured skills in understanding many of the ethical, legal, and socio-economic issues surrounding information and information technology. Percentage scores ranged from 38-88. The average percentage score of 75% suggests that the students equally possess skills in this area. The average percentage scores of the students' information literacy skills presented in Figure 1 below:

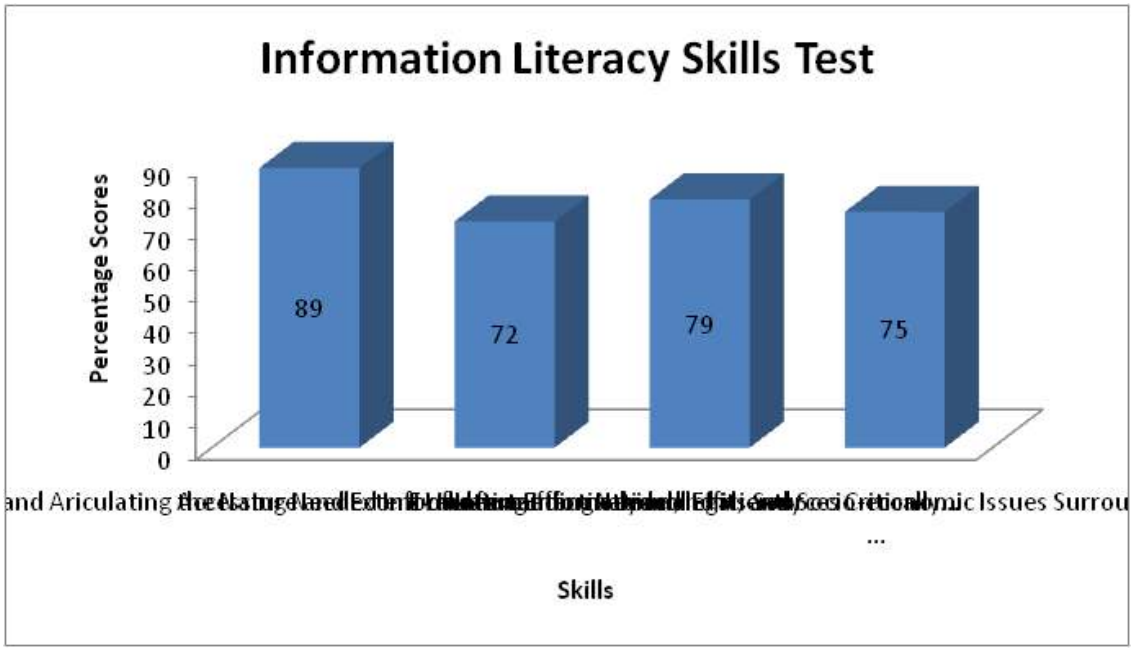


Figure 1: Presentation of the average percentage scores of the Undergraduate Students on Information Literacy Skill Test

Research Question 2: What is the attitude of the undergraduates in Paul University, Awka towards information literacy?

S/N	Items	Mean (x)	Decision
1.	Information literacy is cumbersome and therefore not difficult to understand.	2.55	Agreed
2.	Information literacy promotes independent and lifelong learning.	3.53	Agreed
3.	Information literacy would enable me to excel in my academic career.	3.70	Agreed
4.	Information literacy enables students to make effective use of the university library.	3.78	Agreed
5.	Information literacy is not necessary and therefore should not be part of our curriculum.	1.73	Disagreed
6.	Information literacy is only useful to postgraduate students and advanced scholars.	1.67	Disagreed
7.	Information literacy would still be useful to me even after my first degree programme.	3.98	Agreed
8.	Once I am conversant with ICT, I am information literate.	2.47	Disagreed
9.	Information Literacy enables one to know ethical and legal issues about information use.	3.52	Agreed
10.	There is no correlation between information literacy and academic performance	2.12	Disagreed

Table 4:*Mean (×) Scores of the Responses on the Attitude of Undergraduate Students towards Information Literacy.*

Table 4 showed that students scored above 2.50 in items 1, 2, 3, 4, 7, and 9. This is an indication that they consent with all the statements which support, or portray information literacy positively. On the other hand, the students scored below 2.50 in items 5, 6, 8, and 10. This suggests that they disagreed with all the statements that negate, or portray information literacy negatively. This evidently proved that students have positive attitude towards information literacy.

Research Question 3: What constitute challenges faced by the undergraduates with regards to Information Literacy?

Table 5: ***Mean (×) scores of responses on what constitute challenges undergraduates face with regards to information literacy.***

S/N	Items	Mean($\bar{x}$)	Decision
1.	Students generally lack basic knowledge of information literacy.	2.55	Agreed
2.	Information literacy is not well -integrated or embedded in the University's curriculum.	3.05	Agreed
3.	Students have no interest in information literacy and hence, pay little or no attention to it.	2.50	Agreed
4.	ICT skill of library patrons is low, and this affects their internet search skills.	2.90	Agreed
5.	Students are not well -trained in information literacy in their first year in school and this affects their use of library.	3.17	Agreed
6.	There is no policy for continuous assessment of stude nts' information literacy skills in the University.	3.28	Agreed
7.	The University lacks necessary infrastructures that would encourage information literacy skill acquisition.	3.07	Agreed
8.	Students receive information literacy instruction only during their first year in school and this is not enough to sustain them throughout their academic duration in the University.	3.22	Agreed
9.	There is lack of well -trained instructors to impart information literacy knowledge and skills in students.	3.12	Agreed
10.	The university Library is not well -organized and equipped as to enable students demonstrate their skills in information literacy.	2.63	Agreed

In Table 5, mean scores of undergraduates on information literacy skill acquisition challenges ranged from 2.50-3.28. This clearly indicates that all the issues as presented in items 1 to 10 invariably constitute challenges to information literacy skill acquisition by the students. Although students consented to all the challenges presented, "absence of policy for continuous assessment of students' information literacy skills in the University" has the maximum mean score (3.28), while students' poor interest in information literacy has the minimum mean score (2.50).

Research Question 5: What are the strategies for improving the information literacy skills of the undergraduates in Paul University, Awka?

Table 6: ***Mean (×) Scores of Responses on Ways of Improving the Information Literacy Skills of Undergraduates in Paul University, Awka***

S/N	Items	Mean($\bar{x}$)	Decision
1.	Students should be properly groomed in information literacy in their first years in the University.	3.82	Agreed
2.	Information literacy should be well -integrated into the university's curriculum.	3.72	Agreed
3.	Students should have interest in information literacy and give full attention to it.	3.72	Agreed
4.	ICT skills of students should be improved so as to enhance their Internet search skills.	3.68	Agreed
5.	The University authority should appreciate the importance of information literacy in university education and hence give full support to it.	3.70	Agreed
6.	There should be a policy for continuous assessment of students' information literacy skills in the University.	3.50	Agreed
7.	The University should put in place necessary infrastructures that would encourage information literacy skill acquisition.	3.68	Agreed
8.	Information literacy instruction should be sustained throughout students' stay in the Univ ersity and not only taught during their first year in the University.	3.72	Agreed
9.	There should be well -trained instructors to effectively impart information literacy skills in students.	3.73	Agreed
10.	The university Library should be well -organized and equipped to enable students demonstrate their skills in information literacy.	3.68	Agreed

Table 6 presents the mean scores of the students on strategies for improving their information literacy skills. Mean scores ranged from 3.50-3.82. This obviously indicates that all the issues as presented in items 1-10 are accepted by students as strategies for improving their information literacy skills. Although students subscribed to all the ways of improving their information literacy skills,"proper grooming of the students in information literacy in their first year" has the largest score (3.82), while "development of policy for continuous assessment of students' information literacy skills in the University" has the slightest score (3.50).

Discussion

Result for research question one revealed that undergraduatesof Paul University, Awka possessed the four skill sets of information literacy they were tested on. This implies that

the students might have acquired these skills through trials and error or through informal avenues outside the school's curriculum.

Result of research question two showed that undergraduatesof Paul University, Awka have positive attitude towards information literacy because they disagreed with all the statements that negate, or portray information literacy negatively, and agreed with all the statements which support, or portray information literacy positively. This suggests that the undergraduate students acknowledge and appreciate the importance of information literacy in their scholarship. This agrees with the finding of Ogunlana,et al. (2013) that: "students regard Information Literacy as a valuable skill, and believe that a certain level of Information Literacy skill should be attained."

Result of research question three brought to light challenges undergraduates face regarding information literacy skills acquisition. Challenges result mainly from institutional negligence and inattentiveness to information literacy programme. This is in line with the findings of Singh (2014) that "there are no formal channels for undergraduates to learn information literacy skills."

Result of research question four showed strategies undergraduates believed could help to improve their information literacy skills. The strategies as revealed require the combined efforts of the students and the University. This is in line with suggestions of Bruce (2002) who emphasized need for information literacy policy in order to implement information literacy programmes effectively.

Conclusion

Based on the findings, it is established that undergraduates of Paul University, Awka are information-literate because they possess the skills characteristic of information-literate persons. They might have gained these skills through self-education, or trials and error because their responses showed that information literacy programme was not in place and hence not yet integrated in the University's curriculum. Moreover, the undergraduates' positive attitude towards information literacy showed that they consider information literacy paramount in their scholarship. This indicates their tendency to retain their information literacy skills. Nevertheless, they still contend with some challenges regarding information literacy skill acquisition. Institutional negligence to information literacy programme largely contributes to the challenges. Lastly, the undergraduates of this University agreed that such strategies as proper grooming of students in information literacy programme in their first year, engagement of well-trained information literacy instructors, development of information literacy programme and its integration in the University's curriculum would help to improve their information literacy skills.

Recommendations

Although the undergraduates of Paul University, Awka are information-literate, there is need for information literacy policy in the University and integration of information literacy programme in the University's curriculum. Moreover, continuous assessment of students' information literacy skill is very necessary to sustain their skills. The University's management should holistically address the challenges students face regarding information literacy skills acquisition.

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