

# Assessing the Information Literacy Skills of the undergraduate Library Users of the Nigerian Universities

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## **Abstract**

**Purpose:** The basic aim of this paper is to find out the information literacy skills possessed by the undergraduate students of the federal universities in South-Eastern Nigeria. In addition, the work examined the challenges affecting student's acquisition of information literacy skills and finally identified some strategies that are pertinent for improving student's information literacy.

**Design/Methodology/Approach:** The study adopted an empirical approach, using the survey research design. The instrument for data collection was the questionnaire. A total sample of 650 respondents was drawn from an overall population of 19,837 students of the federal universities' in the area of study. The data generated was analyzed using the mean scores.

**Findings:** The findings of the study indicated that undergraduate students of Nigerian universities lack considerable level of skills for effective use of information. Non exposure of students to library use early in their career, reliance on lecture notes and prescribed texts and students' lack of confidence in their ability to make use of information were among the identified challenges of acquisition of information literacy. Lastly, the strategies for improving information literacy include, introducing the use of the library course to students early in their career, and employing problem-based learning technique in teaching and learning among others.

**Practical Implications:** The overall performance of students is negatively affected when their information literacy skills are low. Quality of graduates in terms research output and performance in the world of work is generally low, leading to low quality products at the national level.

**Originality/Value:** The value of this work is dependent on its identification of the level of information literacy skills possessed by the undergraduate students which should help them to study effectively. It articulated the challenges that affect students acquisition of these skills and identified effective strategies for enhancing them.

**Keywords:** Education, Information, Information Literacy, Library Users, Nigeria, University,

**Paper Type:** Empirical

## **Introduction**

Developments in Information and Communication Technologies (ICT) resulting to tremendous growth in digital information with the new emphasis on life-long learning has brought about increasing interest in information literacy (Wilson: 2001). The new information society has brought about tremendous changes in the way students learn. They need to acquire the skills to use the abundant print and digital information resources available in databases and computer networks. According to the American Library Association (1989) the new dispensation requires better thinkers, problem solvers and inquirers as well as computer literacy and global literacy. Acquisition of information literacy skill

is very critical for students in this rapidly changing environment. For a productive academic life, students need not just to be knowledgeable; they also need the skill to explore knowledge, relate it to other knowledge bases and apply such knowledge in everyday activities.

To become information literate, one need to be able to define an information task and understand the range of resources available in various formats (print, audio-visual and electronic). The individual also needs to be able to design a search plan for securing the needed information, synthesize and evaluate as well as communicate it in a legally acceptable manner (Eisenberg and Berkowitz: 2004).

The above arguments are in line with the prescription of standards given by the Association of College and Research Libraries (2003) which states that an information literate person should be able to;

- Determine the extent of information needed;
- Access needed information;
- Evaluate information and its sources critically;
- Use information effectively to accomplish a task
- Understand the economic, legal and social issues surrounding the use of information
- ....

Inherent in the above standards is an individual who is able to identify and locate information needed to solve a problem as well as one who can apply critical thinking in such information that it will reflect in the life and manner of the individual as someone who has come in contact with information.

Ahiazu (2005), cited reports from the Organization for Economic Cooperation and Development (2000), and the National Institute for Social and Economic Research/World Bank (2002) which clearly established doubts on Nigerian students' level of information literacy. These reports expressed concern that the students lack experience in information handling which has resulted to lowering competence in Nigerian university graduates. In addition, the 2007 world ranking of universities showed that Nigerian universities cannot compete favorably with universities in other countries of the world in both research output and quality of graduates (Guardian: 2007). This may be linked to lack of information management skills.

The above situation justifies this study which aims at assessing the information literacy skill of the undergraduate library users of the universities of the South Eastern Nigeria, using the Big 6 Information Literacy Model of Eisenberg and Berkowitz (2004). The study is based on the assumption that the National Universities Commission (NUC) and the Universities Administration will realize the imperative to include information literacy as a basic requirement for university education in Nigeria. Specifically, the study was designed to:

1. find out the level of information literacy skills possessed by the student library users;
2. identify the problems militating against students acquisition of information literacy skills, and
3. identify the strategies for improving students information literacy skills.

### **Review of Literature**

Information literacy, which has gained prominence as a result of the new information society is conceptually based on various definitions as well as standards and models given by such authors as Paul Zurkowski who coined the concept in 1974 (Doyle, 1994), American Library Association (1989), Valenza (1998), Bawden (2001), Virkus (2003a) and Association of College and Research Libraries – ACRL (2003).

A critical review of the definitions and descriptions given by the above authors point to a number of practical skills which a person must possess in order to be able to function effectively in the digital era. The skills which are related to ones identified by Fjallbrant and Malley as quoted by Virkus (2003b) include skills in identifying, locating, gathering and selecting; storing, recording, retrieving and processing of information from a variety of sources and media; developing successful information seeking and retrieval strategies; mastering complex and multiple information systems, organizing, analyzing, interpreting, synthesizing and evaluating as well as using, presenting and communicating it clearly, concisely and accurately.

The above descriptions of the skills of information literacy have been succinctly articulated by Eisenberg and Berkowitz (2004) who identified six essential problem – solving skills (popularly known as the Big Six Information Literacy Model), that an information literate person must possess thus:

1. Task or problem definition.
2. Creating information seeking strategies
3. Locating and accessing information.
4. Use of information.
5. Synthesizing information
6. Evaluating information.

Reports from studies conducted by Portman and Roush (2004), Ottong (2005) and Igbo (2008) respectively revealed that students demonstrate low level of skills of information literacy, though they are knowledgeable about the library and its print resources including the internet resources. The indication is that the current library instruction programmes of the university (which often takes the form of library tour and orientation) could only help the students to be conversant with the library and its building including the stock. It could be inferred that students ability to make use of Internet resources could be as a result of the self training initiatives embarked upon by many individuals who need to become computer literate rather than waiting to be trained by their institutions. The above situation implies that the library instruction programmes as they are being practiced in most Nigerian Universities are not adequate to develop students' information literacy skills.

A number of problems have been identified by different authors as hindrance to students acquisition of information literacy skills. Anunobi (2002) and Dike and Amucheazi (2003) identified students' lack of exposure to information search early in their academic career, and poor foundation education environment as factors that affect students' acquisition of information literacy skills.

The above opinions seem to be right because it is often said that children live what they learn. If they are made to form the habit of using the library early in their educational career, they would definitely grow into students who have confidence in their ability to use the library and the belief that they cannot learn meaningfully without consulting information resources. Hunts and Birks (2004) identified lack of administrative and institutional support, leading to goals and objectives of teaching not being relevant to students' information needs (Angeley and Purdue:2000), lack of collaboration between faculty and librarians, as well as lack of training of the staff in the use of ICT to enhance their instructions (Foaud: 2000) as part of the problems hindering students from acquiring information literacy skills. The above observations show that the overall students' performance in their educational programmes depends to some extent on the level of administrative support given to them. This is because according to Rader (1990), "it is the significant role of the leadership to influence attitudes, policies and methods as well as

provide the necessary infrastructure for teaching and learning."

Apart from the administrative influence, there are some practices in teaching and learning that have been found to have negative impact on students' information skills. Bruce (1994) identified such practices as heavy dependence upon lecturers for transmission of information, reliance on lecture notes and reading lists and providing students with all the resources needed for learning. The above practices do not engage students in independent learning which is a vital means of developing their information literacy skills. From the foregoing, it is obvious that any institution that desires to produce graduates who can demonstrate a significant level of competence in the world of work should expose the students to a programme of instruction that would help them master the skills involved in effective use of information. The views of Anunobi (2002) and Dike and Amucheazi (2003) have clearly shown that exposing children to learning experiences geared towards the mastery of information search skills at primary and secondary school levels should prepare them for effective use of information at the university level.

Hence institutional/administrative support has been proved to be a very effective means of developing students' information skills. However, Hunts and Birks (2004) and Ojedokun (2007) quoted the ACRL as presenting a set of ideas that should be used to facilitate the development of information literacy skills of students to include,

1. a mission statement of an information literacy programme;
2. statement of goals and objectives;
3. administrative and institutional support;
4. articulation with the curriculum;
5. collaboration among disciplinary faculty, librarians and other programme staff; and
6. assessment/evaluation of the programme.

The above ideas seem to be well articulated approaches which when fully applied by any institution in developing the information competence of the students should be able to yield a far-reaching positive result.

### **Methodology**

The study adopted an empirical research approach using the descriptive survey design.

The population of the study consisted of nineteen thousand, eight hundred and thirty seven undergraduate library users of the four Federal Universities in South-Eastern Nigeria which include, University of Nigeria (UNN, 12,200), Nnamdi Azikiwe University (NAU, 2950), Federal University of Technology Owerri (FUTO, 2642) and Michael Okpara University of Agriculture, Umudike (MOUAU, 2035). The stratified random sampling technique was used to draw a sample of six hundred and fifty students from the universities using students from 200 level and above in the following order UNN (260), NAU (130), FUTO (130) and MOUAU (130).

A 27-item questionnaire was used as the instrument for data collection. The reliability of the instrument was determined by a trial- test carried out using one state university library and

a Polytechnic library situated at Enugu State. Twenty student library users were drawn from each of these libraries for the test. The Cronbach Alpha Reliability method was used to compute the result which established the reliability at 0.78, indicating that the instrument was reliable

The respondents were asked to indicate their responses on a four-point weighting scale ranging from 1-4. The decision was taken based on the criterion mean value of the scale which was 2.50. By this value, any mean that was less than 2.50 indicated a negative opinion and vice-versa.

Out of the 650 questionnaire distributed only 450 which represented Sixty-nine percent (69%) was returned and used for the analysis. The mean score was used in the data analysis.

**Table1: Population of the Study by Universities.**

S/N	University	Number of Registered Library Users
1	University of Nigeria Nsukka(UNN)	12,200
2	Nnamdi Azikiwe University (NAU) ,Awka	2950
3	Federal University of Technology, Owerri	2652
4	Michae Okpara Universityof Agric. (MOUA), Umudike	2035
TOTAL		19,837

Source: Circulation Statistics of Individual University Libraries (2008/2009)

**Results and Discussion**

**Table2 : Level of Information Literacy Skills Possessed by the Students.**

S/N	Skills	UNN	NAU	FUTO	MOUAU	X	Decision
1	Skills in selection of research topic in an area of interest.	2.26	2.10	2.28	2.11	2.19	Low skill
2	Skill in breaking up the topic into related headings.	2.07	2.00	2.21	1.94	2.06	Low skill
3	Identification of relevant print resources of the library (books, encyclopedias, journals etc.	3.56	3.00	3.25	3.41	3.31	High skill
4	Ability to identify relevant audio-visual materials (pictures, charts, maps videos etc.	2.45	2.38	2.49	2.40	2.43	Low skill
5	Identification of internet resources and data bases.	2.63	3.00	2.91	2.76	2.83	High skill
6	Ability to identify concepts to be used in finding information from the identified sources.	2.41	2.39	2.49	2.47	2.44	Low skill
7	Ability to get information on the topic using such search tools as the catalogue, abstracts, indexes and bibliographies.	2.37	2.00	2.17	2.10	2.16	Low skill
8	Ability to use the Boolean operators (AND,OR and NOT) in searching on-line databases	2.07	2.00	2.26	1.97	2.08	Low skill
9	Ability to make outlines of major ideas obtained from the sources consulted.	2.31	2.12	2.35	2.11	2.22	Low skill
10	Ability to cite authors whose ideas were used while writing on a topic.	2.58	2.50	3.00	2.52	2.65	High skill
11	Ability to make summaries of the information gathered using own word.	2.31	1.98	2.00	2.12	2.10	Low skill
12	Ability to record the information under relevant headings.	2.30	2.24	2.49	2.19	2.31	Low skill
13	Skill in assessing the appropriateness of the information gathered to the topic.	2.38	2.00	2.15	2.16	2.17	Low skill

Data in table 2 above indicate that out of the six skills in the model outlined by Eisenberg and Berkowitz (2004) the students can demonstrate some level of skills in two out of the three items(3-6) representing the ability to create information seeking strategies. A high level of skill was revealed on the students' response on the ability to identify relevant print resources of the library in item 3 (3.31) and in their ability to locate internet resources and databases in item5 (2.83), while they cannot identify audio-visual resources(2.43) neither could they identify relevant concepts to be used in finding information(2.44). Also in the area of use of information, the students indicated proficiency in the ability to cite authors (2.65), while they cannot make outline of major ideas obtained in an information (2.22).

However, absolute low level of skills were indicated on the other aspects of the model in terms of problem definition (items 1-2), locating and accessing information (items (7-8);

synthesizing information (items 11-12) and evaluation (item 13). The above findings correspond with the findings of Portman and Roush (2004), Ottong (2005) and Igbo (2008) which indicate that students only have the knowledge of the library and its processes and can identify its resources but cannot effectively apply the other relevant skills of information handling. Hence the students are information illiterate since the ability to identify library resources alone does not make one able to use information effectively. It is necessary to add here that the researchers discussed with a cross-section of students in these universities on how they acquired the skill in identifying internet resources and the databases. Their unanimous response was that they obtained these skills through self-training initiatives, indicating that there has not been any meaningful institutional programme geared at making the students computer literate.

**Table3: Problems Militating against Students' Acquisition of Information Literacy Skills.**

S/N	PROBLEMS	UNN	NAU	FUTO	MOUA	X	Decision
14	Students are not exposed to information search early in their educational career.	3.43	3.90	3.90	3.61	3.56	Impediment
15	Students rely too much on lecture notes and prescribed textbooks.	3.40	3.52	3.36	3.24	3.38	“
16	Students lack confidence in their ability to make use of information resources.	3.00	3.25	3.01	2.98	3.06	“
17	Lecture mode of instruction is not adequate to help students acquire practical skills in information handling.	3.13		3.40	3.00	3.18	“
18	Non- for Non availability of adequate resources for learning in a problem-based context.	2.99	2.52	3.00	2.50	2.75	“
19	Lack of cooperation between librarians and lecturers in developing students' information handling skills.	2.76	3.16	3.00	2.50	2.86	“
20	Staff lack of skills to train students in electronic information handling.	3.17	3.20	3.12	3.00	3.12	“

The findings of the study in table 3 above revealed that all the items were rated positively by the respondents. This indicates that they all constitute problems to students' acquisition of information literacy skills. However, students' lack of exposure to information search early in their educational career has the highest rating (3.58). This shows that students' foundation education has much impact in their future career. This corroborates the views of Anunobi (2002) and Dike and Amucheazi (2003) which attributes students' lack of skills in information literacy to their foundation education

environment that does not sufficiently expose them at primary and secondary level to library and information use. All the respondents also identified such problems as students' over-reliance on the lecturers, lecture notes and prescribed reading lists and inadequacy of resources for learning in a problem-based context. These findings are in line with Bruce's (1994) outline of some practices that do not foster information literacy which include, heavy dependence upon lecturers' reading lists and providing the students with all the resources they need for learning. These practices do not encourage students to engage in independent fact

finding venture. Rather they encourage students to be redundant and passive learners who cannot make any positive contribution in the process of teaching and learning. Hence they continue to lack confidence in their ability to make effective use of information. Lastly, the agreement by the respondents on lack of cooperation between librarians and lecturers in planning and teaching

courses, as well as staff lack of ICT skills to train students are in line with the barriers identified by Foad (2000) which outlined lack of collaboration among faculty, librarians and administrators, as well as staff lack of ICT skills among the problems militating against students' acquisition of information literacy skills.

**Table 4: Strategies for Enhancing Students' Information Literacy Skills.**

S/N	STRATEGIES	UNN	NAU	FUTO	MOUAU	X	DECISION
21	Introducing students to use of the library and information resources early in their career	3.79	3.47	3.82	3.50	3.65	Important
22	Exposing students to problem-based learning experiences that will involve their active participation.	3.34	3.29	2.98	2.78	3.10	“
23	Giving students assignments requiring the use of the library and other information resources.	3.29	2.99	3.49	3.00	3.19	“
24	Relating the objectives of course instruction to information handling needs of the students.	3.15	3.25	3.46	3.19	3.26	“
25	Lecturers collaborating with librarians in planning and teaching courses with the aim of developing students information literacy skills	2.83	3.00	2.76	3.15	2.94	“
26	Introducing information literacy as a course of study in the university.	3.11	3.29	3.08	3.00	3.12	“
27	Evaluating the information literacy skills learnt by students through an end-of-course examination	3.33	3.27	3.49	2.99	3.27	

Evidence from table 4 above shows that all the items were accepted as significant strategies with grand mean above 2.50. The issue of introducing the use of the library and information resources early in students' educational career and exposing students to problem-based learning experiences that will involve their active participation as means of enhancing students skills in information handling are in line with Dike's and Amucheazi's (2003) opinions when they advocated that exposing children to learning experiences that will involve their active participation and develop their information literacy skills at primary school level can prepare them for secondary through university education

The findings on “relating the objectives of course instruction to information handling needs of students, collaboration between librarians and lecturers, introducing information literacy as part of the curriculum of the universities and

evaluating information literacy skills learnt in courses”, relate to the views of the Association of College and Research libraries as quoted by Hunts and Birks (2004). According to this view information literacy skills of students can be enhanced when the programme is characterized by a mission statement, statement of goals and objectives relevant to students needs, articulation with the curriculum, collaboration among faculties and librarians and evaluation of the programme, among others.

**Recommendations**

The following recommendations have been made in the light of the findings of this study:

Suitable learning environment should be provided for students at the foundation education levels (Primary and Secondary) to help them develop skills in information search early in their career. This could be done by sustaining school libraries through the provision of resources that will help the children to acquire skills in

information handling which will enhance their learning through university education.

The National Universities Commission should embrace information literacy development as an important requirement for university education in Nigeria by making it compulsory that every university should include it in her mission statement

Also, university administrations should integrate information literacy into the academic curriculum, encourage collaboration between lecturers and librarians and enhance the ICT capacity of staff through training and retraining. The ICT training will enhance the skills of staff in giving the students effective training in electronic information handling.

Lastly, lecturers should engage problem-based technique in teaching students instead of the usual lecture method of teaching. The essence is to make students adventurous learners who are able to engage in learning tasks that will spur them to finding and exploiting information to the extent that their critical thinking abilities are developed which in turn help them to produce their own information and contribute to knowledge. In other words, less emphasis should be placed on giving lecture notes and prescribing reading lists for students which tend to make them redundant learners.

### Conclusion

The study has examined the level of information literacy skills possessed by the undergraduate library users of Nigerian universities and found out that the students do not possess considerable level of skills for effective use of information. Non-exposure of students to library use early in their academic career has been identified as the most pressing problem affecting their acquisition of information literacy skills. Provision of suitable learning environment at the foundation education level and institutional/administrative support for development of information literacy programmes at the university level are recommended as strategies for enhancing students' information literacy skills.

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