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AN INVESTIGATIVE STUDY OF INFORMATION LITERACY INSTRUCTION AND LEARNING ACTIVITIES OF UNDERGRADUATE STUDENTS IN A FEDERAL UNIVERSITY OF TECHNOLOGY, NIGERIA

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BY

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Abstract

Information is a very useful asset that is indispensable in the day-to-day operations of human beings. There is the need for people to be aware of the importance of information and how to make use of it in all their endeavours. Thus, inability of students to identify, locate, evaluate and make use of information whenever the need arises for it has necessitated the need to conduct a study on information literacy instruction and undergraduate learning activities. The study was carried out among the undergraduate students of Federal University of Technology, Akure and a descriptive survey technique was employed as research method. A random sampling technique was adopted to select only three departments from the school of sciences which were purposively picked because of its being the largest school in Federal University of Technology, Akure. A random sampling method was equally employed to choose thirty students from each of the departments. A structured questionnaire which was validated and reliably tested at 0.68 was distributed to 90 students. Data was analysed using counts and percentages and it was discovered that information literacy truly exists in the institution though it assumes different forms and has impact on students' learning activities. It was concluded that information literacy instruction is very important for learning activities of undergraduate students in the Federal University of Technology, Akure, Ondo State.

Keywords: Information, Information Literacy, Literacy, Learning, Learning Activities.

Introduction

Information is very important in the day-to-day activities of human beings because without information individuals will not have access to sources of living. It is a very crucial weapon for development which is bound to affect all the facets of human lives which include religion, economy, education, health, politics, agriculture, culture and other ways of life. Information is also regarded as the lifeblood of any society and vital to the activities of both the government and private sectors. According to Bell (1974), the dependence upon information as a means of creating innovation and change exerts a very high premium on the ability of nations (developing countries) to have access to and use information to create advances in society.

Therefore, there is the need for individuals to have an understanding of how to look for information, acquire information and make use of it to achieve desired objectives. It is only when this is done that such individuals become satisfied and fulfilled. This is achievable through the existence of a functional information literacy programme in the community where individuals live.

According to United Nations Education, Scientific and Cultural Organisation (UNESCO) (2008), information literacy is defined as one's ability to:

- ➢ recognize his or her information needs.
- ➢ locate and evaluate the quality of information
- ➢ store and retrieve information
- ➢ make effective and ethical use of information
- ➢ apply information to create and communicate knowledge

There are divided opinions, although, about information literacy as to whether the concept has just emerged or it is a progression from the popular library instruction which libraries, hitherto, consider as their professional role being custodian of information. Johnson and Webber (2003), however, believed that libraries have removed limitation on their role as custodian of information and are beginning to see themselves as teaching institutions which have a stake in assisting students in their learning process.

Libraries are, therefore, encouraged to teach users, according to Wright (2007) how to determine their information needs, locate their information resources and assist them in determining how to use any information acquired maximally and ethnically.

Objectives of the study.

The main objective of this study is to investigate the information literacy instruction put in place by the Federal University of Technology, Akure and how that contributes to the learning activities of the undergraduate students. Other objectives are to:

> Investigate the state of information literacy instruction for the undergraduate students of the Federal University of Technology, Akure.

> Find out the various methods adopted by the library in carrying out information literacy instruction for the undergraduate students.

> Identify the roles of information literacy instruction to the learning activities of undergraduate students.

> Identify the challenges encountered by students in their participation in information literacy instruction.

Research Questions.

The following research questions were answered in the study:

i. Does FUTA library organize information literacy instruction for undergraduate students?

ii. How does the department organize information literacy instruction for her undergraduate students?

iii. What roles does information literacy instruction contribute to learning activities of undergraduate students?

iv. How regularly does the department organize information literacy for the undergraduate in FUTA

v. What are the challenges experienced by the undergraduate students in participating information literacy programme ?

Statement of Problem.

The primary responsibility of any academic library is to acquire information materials and make such available for use for both students and teachers. The library, in order to carry out this responsibility, employs a number of information literacy programmes to educate patrons on ways of accessing, using, activating and applying information materials for their information needs. This is done because it has been discovered that patrons, particularly students, lack the necessary information literacy skill that can help them access information resources. They lack the ability to identify, evaluate and apply required information to their learning activities. It is, therefore, necessary for libraries to put in place effective information literacy instruction that can assist students in developing needed information literacy skills. The study, from this back drop, decided to investigate information literacy instruction available in the Federal University of Technology and how such might likely affect students learning activities.

Significance of the Study.

The study is significant in a number of ways. It is beneficial beause it exposes the students to the importance of participating in information literacy instruction and they can explore the instruction programme to improve their learning activities.

It also helps the institution and library management to be aware of the need to support, in all ramifications, information literacy instruction for their students as a way of improving their learning performance. Teachers alike are exposed to the problems and challenges that affect information literacy instruction programme.

The findings, therefore, would reveal ways of evolving more reliable strategies that can sustain good information literacy instruction programme. The findings will also help government and other stakeholders to formulate policies for the integration of good information literacy instruction into educational programs, particularly, at the tertiary institutions as a way of inculcating in students and teachers information literacy skills for effective information utilization.

Literature Review.

Information literacy, as a concept, was introduced by Zurkwaski, Paul in 1974 in a proposal submitted to the National Commission on Libraries and Information Science which, among other things, recommended that a national programme be established to achieve universal information literacy (DehJagger and Nassimbeni, 2002). Different names were later on given to the concept of information literacy which include user education and library use skill though the concept became more regularly used and widespread. The popularity of the concept in the subsequent years is attributable to the activities of American librarians whose

efforts engendered the establishing of American Library Association's Presidential Commission on Information Literacy (PCIL) in 1987 and the commissions' report given in 1989, which linked information literacy to the goals of lifelong learning and effective citizenship (Behrens, 2002).

There is no definite definition of information literacy which is universally acceptable. However, the definition of information literacy posted by the American Library Association has so far been accepted as an all encompassing definition of an information literate person. It was stated that an information literate person has the ability to locate, evaluate and use effectively the needed information (ALA, 2000). The United Nations Education, Scientific and Cultural Organisation (UNESCO)/2008) advanced an equally universally acceptable definition which refers information literacy to one's ability to, among others:

➢ Recognize his/her information needs

➢ Locate and evaluate the quality of information

➢ Store and retrieve information

➢ Make effective and ethical use of information

➢ Apply information to create and communicate knowledge.

On the concept of information literacy instruction, Wright (2007) explains that libraries are saddled with the responsibility of teaching the library users to determine their information needs, help users locate and access authoritative information and help them understand how to use information ethically. This is because information is now available in multimedia formats such as CD-ROM, E-journals, the internet and e-databases. Thus, the need for tertiary graduates, according to Feast, (2003), to acquire and develop information literacy skills has been emphasized in recent years in a world where many analysts believe

access to information is not only important for human survival but also recognized as a very important means of achieving prosperity. The success of information literacy instructions in tertiary institutions of learning according to Stagem, et al (2006) is premised on collaboration between the libraries and academic departments as an exercise that can be used to assist students based on shared goals which the two parties have negotiated and made explicit.

The state of information literacy instruction in Nigeria education system is relatively fair. Virtually all the higher institutions of learning, both at tertiary and sub-tertiary levels, embrace the information literacy instruction programme through mutual understanding between academic libraries and their host institutions. The academic library of the Federal University of Technology, Akure is not an exception in this regards. Information literacy course has been integrated into the university curriculum to teach undergraduate students the use of library and develop skills on identifying, locating and applying information for use. The course recently titled "Information Literacy", is a first year course introduced to students during the first semester. The programme is characterized by a range of activities which comprises navigation of the library, Information Technology (IT), developing students' research skills, independent information search and classroom instructions on information literacy. This has been existent for over a decade and has reportedly encouraged students to improve their learning activities.

According to IFLA (2006), information literacy is a set of skills that can be learned. The set of skills according to IFLA, includes a certain attitude towards learning itself, the use of tools, such as online tutorials, the use of techniques such as working with groups and the use of methods such as a reliance on mentors, coaches and ombudspersons. Information literacy and learning, therefore, improve quality and utility of education and training in both

formal school setting preceding entry into the workforce, and later information vocational or on-the-job training settings.

Method

Study Population.

The population comprises all the 100 level undergraduate students of the Federal University of Technology, Akure.

Sample Size and Sampling Technique.

The sample for the study is ninety students of the one hundred level of the school of sciences in the Federal University of Technology. A purposive sampling technique was employed to select the school of sciences out of the existing seven schools in the Federal University of Technology, Akure. The schools are:

➢ School of Agriculture and Agricultural Technology (SAAT)

➢ School of Sciences (SOS)

➢ School of Management Technology (SMAT)

➢ School of Engineering and Engineering Technology (SEET)

➢ School of Environmental Technology (SET)

➢ School of Earths and Mineral Sciences (SEMS) and, of course, the newly established

➢ School of Health Technology (SHHT).

The study selected the school because it is presently the largest school and has the largest population of students. Therefore, whatever findings that might have resulted from the study could be used for generalization.

At the other stage, three departments were randomly selected from nine departments within the school and ninety students were also randomly selected from the three departments (biology-25, chemistry-30, mathematics- 35)

Instrumentation.

A structured questionnaire titled "Information Literacy and Learning Activities Questionnaire (ILLAQ) comprising five (5) main sections namely: Section A which contained demographic variables, section B consisted of information on measures adopted for carrying out information literacy instruction for the undergraduate students, section C collated information on the roles of information literacy instruction in students' learning activities, section D consisted of information on the regularity of organized information literacy instruction for the undergraduate students and section E which gathered information on the challenges that mar implementation of effective information literacy instruction for the undergraduate students.

Validation and Reliability.

The instrument validity was determined by giving the questionnaire to experts in librarianship and information professionals to scrutinize. The content validity was also determined by examining the library and information curriculum to ensure that it captures the basics in user education and information literacy courses. The reliability of the questionnaire was ascertained by using the Cronbach Alpha 2.0. The reliability figure for each of the section stood at Section B = 0.69, Section C = 0.81, Section D = 0.64 and Section E = 0.56.

Data Analysis Technique .

The data was analyzed using counts, percentages and frequencies.

Data Analysis and Interpretation

Table 1: Demographic Profiles of Respondents.

Gender	Respondents	Percentage (%)
Male	50	56
Female	40	44%

Table 1 indicates that 50 (56%) of the respondents are males while 40 (44%) are females.

Table 2: Respondent's Department

| Department | Gender | | Total | Percentage (%) |
	Male	Female		
Biology	15	10	25	28
Chemistry	15	15	30	33
Mathematics	20	15	35	39

.Table 2 shows that 25 (28%) students belong to Biology, 30 (33%) are in Chemistry while 35 (39%) of the students are in Mathematics. This means that information literacy instruction actually exists in the Federal University of Technology, Akure.

Research Question 1: Does FUTA Library organize information literacy instruction for her undergraduate students?

Table 3: Organisation of Information Literacy Instruction.

Availability of Information Literacy	Yes	Percentage	No	Percentage
	88	98	02	2

Table 3 indicates 88 (98%) of the undergraduate students acceding to availability of Information Literacy while 2 (02%) responded negatively.

Research Question 2: How does the department organize information literacy instruction for her undergraduate students?

Table 4: Forms of Information Literacy Instruction.

S/N	Forms of information literacy	Response	Percentage
1	Navigation of the library	80	89
2	Library orientation	86	96
3	Teaching students' library use	85	94
4	Exposing students to library use skills through assignment/term paper	70	78
5	Introducing students to the library catalogue/OPAC/library websites	80	89
6	Giving group work and library based activities	75	83
7	Engaging students in tutorials on the use of libraries	40	44
8	Involving students in bibliographic search	60	67
9	Teaching students on how to acquire information literacy skills by identifying and evaluating information through search of the library for information resources	65	72
10	Using group discussions	40	44
11	Exposing students to advanced information skills (internet searching etc)	75	83
12	Exposing students to research level skills (reference styles scholarly publishing, citation)	76	84

Table 4 indicates that 86 (96%) of the students chose library orientation as a form of Information literacy in Federal University of Technology, Akure (FUTA), 85 (94%) agreed to teaching students library use, 80 (89%) supported navigation of the library while 40 (44%) in support of group discussion, 40 (44%) were in support of tutorials ranked lowest on the list of activities characterizing information literacy instruction.

Question 3: What roles does information literacy instruction programme play in the learning activities of FUTA undergraduate students?

Table 5: Roles of Information Literacy Instruction Programme in Undergraduate Learning Activities in FUTA.

S/N	Roles of Information Literacy Instruction	Response	Percentage
1	Helps when searching for information materials for assignment	89	99
2	Helps to acquire skill for independent reading	85	94
3	Exposes me to library use skill	89	99
4	Exposes me to effective ways of writing term papers and project	60	67
5	Improves my knowledge on bibliographic citation	60	67
6	Exposes me to effective referencing	70	78
7	Exposes to me basics in Information Technology (IT)	40	45
8	Teaches me about how to search for databases	35	39
9	Educates me on how to identify needed information on my subject area	85	94
10	Helps me to know how to evaluate information materials in my subject area	89	99
11	Has been useful in identifying materials for discussions, symposia and competitions	82	91

Table 5 reveals that information literacy instruction has been useful to students in evaluating information materials in their subject area (99%), has been helpful in knowing how to search for information materials for assignment (99%) and has inculcated in the undergraduate students library use skill however, a few of the undergraduate students admitted that information literacy instruction has been useful for searching databases and for experiencing in information technology for their chosen subjects (39%, 45%) respectively. This implies that the library has been resourceful in teaching library use and information search on the shelves and not much access to Information Technology (IT).

Question 4: How regularly does the department organize information literacy instruction for the undergraduate students?

Table 6: Regularity of Organization of Information Literacy Instruction

S/N	Regularity of Information Literacy Instruction	Response	Percentage
1	Information literacy instruction is organized monthly	02	2
2	Information literacy instruction is organized twice a session	02	2
3	Information literacy instruction is not introduced at all	01	1
4	Information literacy instruction is not consistent	01	1
5	Information literacy instruction is organized only once in all semester	89	99
6	Information literacy instruction is organized only once in a session	89	99
7	Information literacy instruction is organized only once in the final year	02	2
8	Information literacy instruction is organized once but not regularly updated for undergraduate students	89	99
9	Information literacy instruction is organized once during undergraduate days	89	99
10	Information literacy instruction is regularly organized	89	99

Table 5 indicates that 99% of undergraduate students confirmed that Information literacy instruction is organized only once a semester, also 99% agreed that Information literacy instruction is organized once in a session and 99% agreed that Information literacy instruction is organized regularly, however, 89% believed that Information literacy instruction is organized but not regularly updated for undergraduate students. On the other hand, only 1% believed it is consistent, another 1% believed it is not introduced at while only 2% believed it is organized monthly and twice a session respectively. This means that almost all the undergraduate students believed that Information literacy instruction is regularly organized.

Question 5: What are the challenges of information literacy instruction organized by the department for the undergraduate students?

Table 7: Challenges of Information Literacy Instruction for Undergraduate Students

S/N	Challenges	Response	Percentage
1	Inadequacy of information professionals for the programme	60	67
2	Inadequate provision of IT facilities like computers	75	83
3	Irregular supply of power for demonstration	80	89
4	Inadequate learning facilities (shortage of lecture rooms)	65	72
5	Inconducive learning environment (ventilation, good chairs, etc)	60	67
6	Low interest of students in the programme (perceiving the programme not as a core course)	50	56
7	Low credit unit attached to the course compared to other academic courses in the university	50	56
8	Lack of adequate time for executing the programme due to administrative encumbrances	12	13
9	Distraction by emerging IT devices like mobile phones, Ipads, tablets etc	10	1
10	Inadequate funding for library	70	78

Table 7 indicates that inadequate funding (78%), inadequate learning facilities (72%), inconducive learning environment (67%) and low interest of undergraduates students in Information Literacy instruction are the major challenges affecting the Information Literacy instruction programme. However, challenges of lack of adequate time (13%) and distraction by emerging IT devices (1%) ranked lowest on the list of challenges.

Discussion of Findings

The findings revealed that Information Literacy instruction actually exists in the Federal University of Technology, Akure. This is in agreement with the position of Lau (2012) who admitted that library and information professionals have a role to play in helping users to improve their ability to find and use information through the existence of Information Literacy instruction programme. The Information Literacy instruction in Federal University of Technology, Akure also assumes different forms which agrees with the findings of Ullah and Ameen (2014) who explained, in the study conducted in Information Literacy instruction of Pakistarian medical libraries, that 74% of the respondents had offered some types of Information Literacy instruction in their institutions during the previous year ranging from orientation to research-level skills. Regarding the Information Literacy challenges, Ullah and Ameen (2014) also explained that there was the absence of required Information Technology (IT) skills, support and facilities in Pakistanian medical libraries for developing Information Literacy instruction programme for undergraduate students.

<u>Conclusion</u>

It is hereby submitted that information literacy instruction is organized for the undergraduate students of Federal University of Technology, Akure. The programme is characterized by different forms which are navigation of the library, library orientation,

introduction to library web sites and giving library based assignment. However, challenges like inadequate IT facilities and inconducive learning environment were identified as problems militating against effective information literacy instruction programme for undergraduate students.

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