Impact of Information Literacy Skills on Academic Performance of Students of Federal Polytechnic, Ede, Osun State, Nigeria

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ABSTRACT

The society is facing the challenge of navigating the ever rapidly increasing volume of information available via equally fast developing technology. In order to successfully deal with this information rich - environment, it has become very necessary for students in institutions of higher learning to develop information literacy skills in their current studies as well as their future lives to become independent lifelong learners. Information literacy skills empower students to develop abilities and skills to harness and use information resources efficiently and effectively. It is in the light of the above that this research attempts to assess the impact of information literacy skills on the academic performance of students in Federal Polytechnic, Ede. This work adopts a survey research method and utilizes questionnaire to generate data. Out of one hundred and fifty (150) copies of questionnaire distributed, 93.3% were returned with valid response. Data collected are analyzed with the use of descriptive statistics. It is revealed among others that most students do not have skills on how to use information resources; that information literacy skill forms the basis for independent lifelong learning. However, it is concluded that librarians should work hard to develop and integrate effective information literacy skill programmes to enhance students' research abilities, which include problem solving, creativity and presentation of ideas. The librarian should also provide assistance to the polytechnic students on how to get relevant resources and where to locate the resources using OPAC (Online Public Access Catalogue).

Keywords: Academic performance, information literacy skills, information resources, library.

INTRODUCTION

Information resources is now presented in various complicated formats; prints, non-prints, electronics, and many other information bearing media available in

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modern libraries and information centres. It has, therefore, become necessary to equip users with different information literacy skills. Palsson (1989) has shown that access to and interaction with the library system improves the students learning skills and academic performance. The acquisition of information literacy skill is an important impute that can cater for the varying learning styles and make students to be self- reliant in the use of library resources. Since the 19th century, librarians have been engaged in teaching users how to effectively use the library and its resources, using various terms such as library orientation, bibliographic instruction, user education, library instruction, information research skills, and so on (Kaufman, (1992). In the early years, librarians emphases was given to bibliographic instruction, letter to user education and more recently to problem - based learning, which has information literacy as its core (Hepworth, 2000).

Information literacy is the ability in finding the information one needs, including an understanding of how libraries are organized, familiarity with the resources they provide (including information formats and automated search tools), and commonly used research technologies. The concept also includes the skills required that critically evaluate information content and employ it effectively, as well as an understanding of the technological infrastructure on which information transmission is based.

Through the consciousness of the librarians and other information professionals, information literacy importance has spread world over mainly as a result of the technological development of the 21st century that has propagated information proliferation, both in terms of quality and quantity (Bruce and Candy, 2000). This situation has created a challenge in terms of knowledge and skills that students in academic institutions should posses, in order to order and use information effectively and efficiently.

In order to overcome the challenges, librarians and other information professionals reconfigured the library skills instruction of the 1960s into a research framework, presently called information literacy skills. Today, information literacy skill has thus grown in strength and recognition in higher educational institutions of learning. Information literacy skill is considered as an important tool needed by all information users, in order to empower themselves with skills needed for life - long learning and to make them competitive in a global information age. The importance attached to information literacy skill has led many educational institutions including polytechnic to introduce information literacy skill programme that would equip students with adequate knowledge and skills for being effective information users.

An information literate student should be able to determine the extent of information needed, access the needed information effectively and efficiently, evaluate information and its sources critically, incorporate selected information into own knowledge base, use information effectively to enhance and accomplish his personal academic studies and research activities. This study is on the impact of information literacy skill on the academic performance of student in Federal Polytechnic, Ede. Measures that can lead to further improvement of the information literacy skill programme will be recommended in the study.

Academic Libraries have a vital role to play in meeting the multi-dimensional demands for information and knowledge of students, teaching and non - teaching staff. Libraries invest huge amount of money every year on the purchase, process and storage of information resources to serve its users. But changing information environment, application of ICT, availability of electronic information resources both in online and offline has posed a serious challenge to its effective utilization of library resources, services and facilities for better academic performance by students in Federal Polytechnic, Ede, Nigeria. Therefore, the objectives of the study are to:

1.   Assess the impact of information literacy skills on academic performance of student of Federal Polytechnic, Ede.
2.   Determine the extent of use of library information resources in Federal Polytechnic, Ede Library.
3.   Examine the level of students skills in information search, collection and evaluation.
4.   Identify the adequacy of various information resources available in Federal Polytechnic, Ede Library.

To achieve the above objects, the following research questions were raised to guide the study.

1.   To what extent do information literacy skills affect academic performance of the students?
2.   Are the various information resources available in Federal Polytechnic, Ede Library   adequate?
3.   Do information literacy skills increase the level of utilization of information resources?
4.   What is the level of students' information literacy skill in locating, collecting, evaluating and using information resources?

The study is intended to enlighten students on the importance of information literacy skills on their academic performance. The study will empower

the students to maximally utilize library resources. The study will also enable the librarians to help students to develop abilities and skills to harness and use information resources efficiently and effectively. Finally the study will create and foster new ways of teaching information literacy skill programme to the complexities of current information environment.

Information Literacy

Information Literacy is primarily rooted in the concepts of "library orientation, user education, library skills, bibliographic instruction, user instruction" among others depending on each library's experience and perception. Lewhebura (1999) argues that in spite of the fact that these concept may be different, they all emphasize on teaching the user especially the students how to acquire techniques of information searching in various libraries in order to enable them use the library resources effectively and become information literate. According to Carpenter (1989), information literacy is the ability to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information. He further opines that information literacy is the basic for life - long learning. Wikipedia (2006) conceptualizes information literacy in term of a set of competence that an informed student of any academic institution ought to possess to participate intelligently and actively in the society. Library users especially students are instructed on how information is obtained, interpreted and used for academic and productive activities. In the same vein, Goad (2006) rightly avers that success in academic endeavour, both personal and organization (non-personal) comes from finding essential information and optimizing its effectiveness. He concludes that today's academic environment demands skills for a knowledgeable and productive use of information resources. Information literacy enables students develop skills that help them become effective and efficient learners.

With the application of Information and Communication Technology (ICTs) to information production, processing, packaging and dissemination, reaching, learning and research are taking on new shapes and boundaries particularly changed how students access and use information resources. Williams and Zald (1997) note that students often lack the skills necessary to succeed in this rapidly changing environment, and students need training and support to make use of new technologies for effective learning. Thus, the current information environment provides an opportunity for librarians to play a key role in the

evolution of an integrated information literacy process. Their role is to empower students by helping to develop their information skills so that they may be able to find, evaluate and use information to enhance their academic performance.

Libraries are known for acquisition, preservation and dissemination of relevant information resources in order to support the teaching and learning processes in parent institution. The information resources available in most academic libraries today are usually in prints, non - prints and electronic formats. These include books, journals, and audio - visual and e - resources. The sheer abundance of information resources will not in itself create a more informed student without a complementary cluster by abilities necessary to use information effectively (Julien and Boon, 2004). Adam and Wood (2006) stress that lack of information literacy skills was partly the cause of underutilization of existing information resources. Mutule, Wamukoye and Zulu (2006) also note that students were ill-equipped with requisites information literacy skills, such as the ability to identify, locate, review, select and apply information needed for their studies and had difficulties in using relevant tools to locate information and knowledge.

To master these skills, students must not only be taught how to formulate a search strategy but must be made aware of the effectiveness involved. They must also practice to enhance their skills. When students master the skills of how to find and use information effectively, their researches will improve, they will perform self - directed searches, personal control will be accomplished, they will compete successfully in academic activities and will improve their academic performance in general (Gross, 2000).

Role of Academic Library in Information Literacy Skills

The library is a big place and contains a lot of information resources which needs guidance before one can retrieve or locate any of them. Therefore, one needs the skills, which include ability to:
- Recognize the need for information sources
- Formulate search questions on information needs
- Identify potential information
- Develop successful search strategies
- Access print, non - print and electronic resources available.
- Evaluate available information accessed
- Organize information for practical application.

This information literacy skill function of libraries imbues in user the ability to locate, manage and use information effectively for a range of purposes (Bruce, 1998). The information literacy skills that allow someone to perform well in society would involve a "whole range of literacies, including visual literacy, media literacy, technological literacy, and computer literacy among many others (Amucheazi and Dike, 2002). These skills are required for use of library and are also information literacy skills. Through development of these skills, the library should no doubt be able to effect changes in attitude to learning, inculcate a spirit of enquiry and promote the habit of seeking knowledge and information as basis for decision making. Academic library played a role in what was called library orientation (introducing new students to library resources, services and facilities) and how to locate and use books and printed journals on the shelves (Julien and Boon, 2004). In many academic institutions the responsibility of information literacy skill education rest with department of general studies alone, librarians are not involved.

However, researchers like Bundy (1999), Julien and Boon (2004) argue that although librarians are not trained in effective instruction method, they are most familiar with the issues at stake, they can supply expertise and they have experience in the framework within which these goals could be accomplished. If information literacy skills programmes are integrated across the academic curriculum, there is the need for collaboration between librarians and lecturers to ensure effective teaching and learning. Bundy (1999) emphasizes this collaboration and is of the opinion that librarians, lecturers and administrators must form a strong partnership. What is expected of the librarian and what teaching role he/she must play are sorted out. Joint decisions on curriculum development and learning outcome are for necessary impartation of information literacy skill to students. Fiegen and Watson (2002) summarize the collaboration by indicating that the faculty will supply course objectives and assessment instruments while the librarians will supply information literacy skills standards and search strategies. Together, they will match course and information literacy skills objectives and assessment.

METHOD

A survey research method was adopted for this study. Population for this study is made up of all final year Higher National Diploma (HND) students in Federal Polytechnic, Ede. There are thirty academic departments in the institution.

Stratified random sampling technique was adopted to select five students from each academic department. Thus, a total of 150 respondents (students) the sample for the study. The data used for this study were obtained mainly through the use of questionnaire, which was administered on randomly selected students of Federal Polytechnic, Ede. Items in the questionnaire focused on awareness and use of library resources, level of information literacy/retrieval skills of students, utilization of library resources and students' evaluation of information resources and academic performance of students. The use of frequency count and simple percentage methods of data analysis was adopted for this study.

RESULTS AND DISCUSSION

Table 1 presents information on the adequacy of information resources in the Library. Findings show that 89.29% agree that textbooks were adequate while 11.1% disagree. Also, 36.41% of the respondents agree that Journals, Magazines and Newspapers were adequate while majority (63.67%) disagree, 63.05% of the respondents disagree that E-resources were adequate while 45.00% agree. The implication to be drawn from this is that the various types of information resources are to a large extent very adequate.

Table 2 presents information on awareness and use of Library resources. Findings show that 93.17% of the respondents agreed that they are aware of the information resources available in the library and use them adequately well while 6.43% did not agree. Also 93.27% of them said they always find whatever information they wanted whenever they use the library while 6.43% disagreed with the fact. 91.43% of the respondents agreed with the assertion that they locate needed information in the library while 8.57% of them said they always find it difficult to locate needed information in the library. The implication to be drawn from this is that the students are aware of library resources and find it easy using the library. Table 3 presents information on the level of information literacy and retrieval skills. Findings reveal that 89.29% of the respondents are of the opinion that they formulate search questions based on their information needs, 79.28% of them disagreed with the fact that they often find it difficult to locate potential sources of information in the library. 62.85% of the students said they find required information with so much frustration. The implication of the findings is that most students possess the required information literacy skills but always encounter frustration in location of the needed information materials due to the fact that information is expanding at a fast rate resulting in information explosion.

Table 4 presents research questions on information utilization. Based on the finding, 89.28% of the respondents choose appropriate reference sources for their information needs, 91.43% of them agree that they organize and synthesize information in the required form and multiple sources. Also, 85.71% of the respondents said they use information for solving critical problem, while 85.00% agreed that they utilize information search technologies. The implication of this is that students utilize information from various sources for critical problem solving. This agrees with the position of Fabunmi and Olawale (2013).

Table 5 presents information on evaluation sources. Findings of information sources by students reveal that 70% of the respondents were of the opinion that they compare information from various sources for their academic assignment, 77.86% of them say they investigate various points of literature, while 85.72% of the respondents agree with the fact that they read text and select the main ideas.

Table 6 presents information on academic performance of student. Based on the findings, 87.15% of the respondents agree that frequent use of library information resources assist them in their academic activities, 84.90% of them agree that their ability to locate and use information resources has great positive impact on their academic performance. Majority (95%) of the respondents are of the opinion that evaluation of information from various sources have improved their knowledge acquisition, 71.43% of them agree that the ability to identify potential sources of information and develop search strategies has helped them in solving difficult academic problems. The implication of the findings implies that the effective utilization of library resources, service and facilities has a positive influence on the academic performance of students. It also confirms the opinion of Bruce and Candy (2000), who posit that information literacy skills not only enhance students' academic performance, ability to manage, locate and evaluate information but it also assist them to use information for continued professional development.

Table 1: Adequacy of information resources available in the library

S/N	Variables	SA	A	D	SD	Total	%
1.	Textbooks	95 (67.86)	30 (21.43)	10 (7.14)	5 (3.57)	140	100
2.	Journals, Magazines & Newspapers	31 (22.14)	20 (14.25)	36 (25.71)	53 (37.86)	140	100
3.	Reference Sources	51 (36.42)	37 (26.43)	27 (19.29)	25 (17.86)	140	100
4.	Audio – Visual resources	22 (15.71)	10 (7.14)	48 (34.25)	60 (42.86)	140	100
5.	E – resources	33 (23.57)	30 (21.43)	20 (14.29)	57 (40.71)	140	100

Source: Survey, 2017

Table 2: Awareness and use of library resources

S/N	Variables	SA	A	D	SD	Total	%
1.	I am aware of library resources and use them	85 (60.71)	46 (32.86)	4 (2.86)	5 (3.57)	140	100
2.	Whenever I use the library I find what I want	95 (67.86)	36 (25.71)	5 (3.57)	4 (2.86)	140	100
3.	I find it difficult to locate needed information in the library	88 (62.86)	40 (28.57)	4 (2.86)	8 (5.71)	140	100
4.	I usually find what I want but with much frustration	51 (36.42)	37 (26.43)	25 (17.86)	27 (19.29)	140	100

Source: Survey, 2017

Table 3: Level of Information Literacy and Retrieval Skills

S/N	Variables	S.A	A	D	SD	Total	%
1.	I formulate questions based on my information need	100 (71.43)	'25 (17.86)	5 (3.57)	10 (7.14)	140	100
2.	I often find it difficult to locate potential sources of information	29(20.71)	23(16.43)	3(23.57)	29.55(39.29)	140	100
3.	I find it difficult to identify useful information in the library	29 (20.71)	23 (16.43)	3 (23.57)	55 (39.29)	140	100

Source: Survey, 2017

Table 4: Information Utilization

S/N	Variables	SA	A	D	SD	Total	%
1.	I choose appropriate reference source for a particular information	94 (67.14)	31 (22.14)	2 (1.43)	13 (9.29)	140	100
2.	Organize and synthesize information in the format from multiple sources	68 (48.57)	60 (42.86)	8 (5.71)	4 (2.86)	140	100
3.	I use information for critical thinking and problem solving	59 (42.14)	61 (43.57)	4 (2.86)	16 (11.43)	140	100
4.	I utilize information search techniques	67 (47.86)	52 (37.14)	1 (0.71)	20 (14.25)	140	100

Source: Survey, 2017

Table 5: Evaluation of Information Sources

S/N	Variables	SA	A	D	SD	Total	%
1.	I compare Information from various sources for my assignment	50 (35.29)	48 (34.29)	22(15.71)	20(14.29)	140	100
2.	I Investigate various points of the literature	69(49.29)	40(28.57)	15(10.71)	16(11.43)	140	100
3.	I read text and select the main ideas	79(56.43)	41(29.29)	11(7.85)	9(6.43)	140	100
4.	Identify verbatim of information for latter quoting	51(36.43)	42.49(31.42)	20(14.29)	25(17.86)	140	100

Source: Survey, 2017

Table 6: Academic Performance

S/N	Variables	S.A.	A	D	S.D.	Total	%
1.	Frequent use of library information resources assist in my academic activities	88(62.86)	34(24.29)	3(2.14)	15(10.71)	140	100
2.	Ability to locate and use information resources has great impact on my academic performance	92(65. 71)	27(19.29)	10(17.14)	11(17.86)	140	100
3.	My ability to evaluate information from various sources has improved my knowledge	87(62.14)	46(32.86)	3(2.14)	4(2.86)	140	100
4.	Ability to identify potential sources of information and develop search strategies has help me in solving difficult academic problems	40 (28.57)	60 (42.86)	22 (15.71)	18 (12.86)	140	100

NOTE: SA (Strongly Agree), A (Agree), D (Disagree), SD (Strongly Disagree)
Source: Survey, 2017

CONCLUSION AND RECOMMENDATIONS

The goal of this study was to establish the impact of information literacy skills on academic performance of students of Federal Polytechnic, Ede. In the networked world, a polytechnic library's work is no longer based on the number of volumes of information resources possessed, but in the ability of the users to locate, access, evaluate, and adapt information produced globally to local need. Librarians must maximize their potential to be in position to assume their role in the teaching and learning process. The academic has to develop educational strategies and process. The academic has to develop educational strategies and learning resources to help students develop information literacy skills. Librarians must be willing to promote and share their experience in this information age to support our institution's educational mission. Librarians should not only be opener of doors and gateways to information; but should also be key enablers, able to empower students to become more self-sufficient in developing information gathering, evaluation and use skills which will assist them to be well resourced for changing life circumstances. This in effect will undoubtedly enhance the student's academic performance in developing viable careers.

In the light of the outcome of this study, the recommendations below are worth considering for high quality academic performance among students of Federal Polytechnic, Ede. The Polytechnic administration should influence policies and provide enabling environment for learning. They should also ensure the integration of the information literacy skill program into the institutions curriculum, provide necessary information resources like books, journals, audio-visual, E-resources, ICT facilities and resources needed for learning and finally foster collaboration between the librarians and other faculties for the purpose of

teaching information literacy skills with particular emphasis on its practical component. This will go a long way in equipping the students with the skills to effectively utilize library resources especially for today's information society. It is also recommended that library should continue to train its staff for effective delivery of information literacy skills, and in order to ensure quality information literacy skill delivery without compromising effective library service, it would be a step in the right direction to select staff interested in teaching to teach information literacy skills.

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