

**PROVIDING SUSTAINABLE
&
EQUITABLE ACCESS TO
INFORMATION:
PERSPECTIVES FROM NIGERIA**

Festschrift In Honour of

**PROFESSOR
MORAYO
IBIRONKE
ATINMO
@ 70**



**'Niran Adetoro
Christopher Nkiko**

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Festschrift in Honour of Professor Morayo Ibironke Atinmo at 70

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Table of Contents

Preface

Bibliography of Professor Morayo I. Atinmo

Notes on Contributors

1. Information and 2030 Sustainable Development Agenda
- *Professor M.O. Akintayo* 1
2. Production Cost, Willingness to Purchase, Copyrights
Administration and Publishers Output of Secondary
Textbooks in Nigeria: A conceptual review - *Michael Duro
JODA* 24
3. Electronic Information Service Provision and The Role
of Law Librarians in Academic Law Libraries in Nigeria -
Olorunfemi & Doreen Yemisi 50
4. Electronic Resources Preferences and Use Dimensions
by Information Studies Undergraduates in Nigeria -
Philips Oluwaseun Ayeni & 'Niran Adetoro Ph.D 77
5. Computer, Letters and Typography in The 21st Century:
Antecedent, Trend And Expectation - *Rod Adoh Emi,
Ph.D & Samkay Adekoya* 101
6. Availability and Access to Information among Rural
Dwellers in Nigeria: Inhibiting Factors and Prospects -
Dr. A.O. Issa, B.B. Amusan, Nafisa Rabi'u & Ojokuku, B. Y. 137

7. Information Literacy Skills: Developing Competencies for NOUN Library Users - <i>Olaronke O. Fagbola, Ph.D</i>	160
8. Designing Green Libraries With New Technology for Enhanced Access to Information - <i>Adetoun Adebisi Oyelude & Adeyemi Kazeem Ajayi</i>	192
9. Indexing And Abstracting Of Legal Resources In A Special Library - <i>Anyagwu Uluocha Ph. D</i>	206
10. Information access for the visually impaired in the digital age - <i>'Niran Adetoro Ph.D</i>	231
11. Trajectories for Theoretical Reconstruction of Libraries as Institutions: Tactics for Coining New LIS Research Questions - <i>Samuel C. Avemaria Utulu & Roselyn Subair</i>	246
12. Use of media resources in disseminating electoral information to young adults in Ibadan, Nigeria - <i>Fadekemi Oyewusi</i>	292
13. Cataloguing and Classification Education: Nigerian Perspective - <i>Samuel O. Ogunniyi, Ph.D, Michael Jato & Mr. Felix E. Efosa</i>	319
14. The Role Of Information Communication Technologies In Educational Management In Nigeria - <i>Awodoyin, Francis Olajire Edem, Essiere Ekop</i>	336
15. Adoption Of Koha Software In Universities In South-West, Nigeria - <i>Airen Adetimirin Ph.D</i>	361



INFORMATION LITERACY SKILLS: DEVELOPING COMPETENCIES FOR NOUN LIBRARY USERS

By

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Abstract

Information competencies are a key factor in lifelong learning. They are the first step in achieving educational goals. Libraries are indispensable in every facet of higher education and effective library support to distance learners is mandatory for qualitative delivery of instruction and learning. The focus of this chapter is on developing information literacy skills for distant education students with emphasis on the National Open University of Nigeria library users. The author examines what information literacy is all about vis a vis concepts; basic elements; hallmarks of an information literate individual; and symptoms of information illiteracy. The chapter further discusses information literacy core competencies; basic skills of information literate; the importance of information literacy to NOUN library users; the role of NOUN library and librarians in impacting information literacy skills on distance learners.

Keywords: Distance learner, Information literacy, Information literacy skills, Library.

Introduction

Information competencies are a key factor in lifelong learning. They are the first step in achieving educational goals. Libraries are indispensable in every facet of tertiary education and effective library support to distance learners is mandatory for qualitative delivery of instruction and learning (Igwe, 2009). Unarguably, the provision of quality library services to distance learners is one of the most exciting and challenging development that has occurred in modern librarianship (Nduka, 2013, as cited in Watson, 1999).

Without mincing words, Information and Communication Technologies (ICTs) have transformed all aspects of education in Nigeria and in particular, university education as pioneered by the National Open University of Nigeria (NOUN), a foremost citadel of open and distance education (a rapidly growing segment within tertiary education) in Africa generally, and Nigeria in particular. Undoubtedly, ICTs have virtually the characteristics of the learning environment, paving way for the new learning environment, new learning strategies, the emerging new learners, new teachers and new librarians (Sacchanand, 2002).

Similarly, technology has had a significant impact on information literacy education, with Web 2.0 tools (wikis, blogs, social bookmarking, Twitter, Facebook, WhatsApp, YouTube and so on) being used to produce, store and retrieve information and help users to navigate the ever-changing information environment (Dubicki, 2013). Interestingly, librarians are important and key members of this ever expanding team of learning support staff in the education business. Librarians are part of the learning community and are experts in information management whether on-campus or off-campus settings otherwise referred to as distance learning.

Distance learning is often described as the formalised learning received while students are on location outside their university campus

(Adetimirin & Omogbhe, 2013). It allows university students to complete classes and attain degrees where ever they are located, thus attracting more non-traditional students to return to school for coursework. Similarly, Sacchanand (2002) observed that through distance learning, access to higher education is provided with no boundaries of space and time. He explained that the scope of learning opportunities has widen to include online education courses, access to virtual library services and electronic information resources and so on. According to Fry, Malone & Kathee (2014), distance learners are otherwise referred to as 'remote users' by librarians, as they may access diverse library resources at home. They noted that all these are possible because this group of learners are open to adapting quickly to, with the aid of appropriate technology and collaborative software.

In Nigeria, distance learners, particularly those whose physical access to local academic research libraries is limited as it operates at the National Open University of Nigeria (NOUN), require access to a broad scope of scholarly online research materials, subject databases and electronic information resources that meet the needs of the different courses taught at the institution. It is observed that distance learners often receive much of their instruction in the form of courses packaged essentially to provide built-in opportunities for research, evaluation and other self-directed activities (Fabbro, 2004).

Basically, library support is a key element in the open and distance learning environment and library services are essential support service to distance education students who access library, educational resources and services in various ways. Though, the library needs of open and distant learners are not unique; they have the same library and information needs. However, distance learners need much more information search support than on-campus learners (Fang, 2006). Hence, librarians, being in a dynamic profession are expected to constantly update their knowledge with relevant skills needed to operate in any educational setting be it

conventional or unconventional like NOUN, a foremost open and distance learning institution in Nigeria.

Librarianship has always been evolving, with the adaptation to new technologies, new media and the ever-changing needs of users. These changes have accelerated to match rapid developments in ICTs; the Internet has dramatically increased the range of information resources available and the way it is delivered. Similarly, ICTs have changed the expectations and demands of library users, and the skills and training that the user(s) need has also evolved. Moreover, the ever increasing amount of information available on the Internet gave rise to the buzz word "Google it". Users frequently use this popular search engine - Google as their first point of call when searching for all types of information on the Internet, rather than using subscription databases, library websites (gateways), subject gateways (directories) and quality information resources (under-exploited tools). As a matter of fact, many users believe that everything (anything) can be found through Google search, hence, the preference for the ease and speed of Google.

Interestingly, an increasing amount of information exists in electronic format, but information users are less able to find what they need because they do not have sufficient skills. Hence, equipping users with the right skills to function in the electronic information environment has been a real challenge to librarians. Unarguably, libraries have always been an integral part of learning, helping learners (users) find, evaluate and exploit resources. Now, with the ever increasing number of digital information resources, librarians are expected to play a crucial role in navigating users through the complex digital information environment (Secker, 2008). Consequently, to fit in to this unique role, librarians working in NOUN and the library management are to engage in the setting up of, collaborate with faculty and other stakeholders in the delivery of information literacy programme education to the teeming population of distance education learners in all the study centres scattered across Nigeria.

Concepts of Information Literacy

Information literacy is a major component of the educational process. It connotes different meaning to different audience. However, whatever it means, the term is all encompassing. Traditionally, literacy means the ability to read and write. However, there are various types of literacy. These include audio-visual literacy, print literacy, computer literacy, media literacy, web literacy, technical literacy, digital literacy, visual literacy, network literacy, functional literacy, library literacy, nominal literacy and active literacy (focuses on making people aware of how to read and write in their day to day activities). Information literacy is a combination of all these concepts but goes beyond them (Shenton, 2009; Ranaweera, 2008).

Information literacy is a term generally used to describe the ability to find and use information effectively in relation to need and purpose (Shyh-Mee, Kiran & Diljit, 2015). It is the skill required in finding the information one needs, including an understanding of how libraries are organised, familiarity with the resources provided, information formats, automated search tools and knowledge of commonly used research techniques (Fry et al., 2014). The concept also includes the skills required to critically evaluate information content and an understanding of the technological infrastructure on which information transmission is based, including its social, political and cultural context and impact (Fry, et al., 2014 as cited in the Online Dictionary of Library and Information Science, *n.d*).

Information literacy is a learner centric instructional template that, if applied strategically, can foster the development of independent, self sufficient learners. As a matter of fact, information literacy is all encompassing, its skills instruction cuts across all disciplines; its practice is not educator dependent. Parents and families members can apply this skill set in supporting student learning at school, at home, and in the workplace (National Forum on Information Literacy [NFIL], 2016). Hence,

developing information literacy skills are very essential for faculty, learners and other support staff at the NOUN so that they can explore to the fullest the library and information resources available in the open and distance learning system.

Information literacy is about people's ability to operate effectively in an information society. This involves critical thinking (that is the little voice in your head that urges you to question everything, analyse, evaluate, look below the surface.. don't believe everything you read...ask questions!), an awareness of personal and professional ethics, information evaluation, conceptualising information needs, organising information, interacting with information professionals and making effective use of information in problem-solving, decision-making and research (Secker, 2008 as cited in Bruce, 1999).

According to the American Library Association ([ALA], 2000), information literacy forms the basis for lifelong learning, which is learning pursued throughout life - flexible, diverse and available at different times and in different places. Lifelong learning crosses sectors, promoting learning beyond traditional schooling and throughout adult life. Incidentally, this definition of information literacy by ALA (2000) is the hallmark of the National Open University of Nigeria's open and distance learning programme. Information literacy is common to all disciplines, learning environments and all levels of education. It enables learners to master content and extend their investigations, become more self-directed and assume greater control over their own learning. In a nut shell, information literate student / individual can successfully accomplish tasks related to research, group presentation, problem-solving, reasoning, critical reading, analysis, reflection, production of new knowledge and so on (Fabbro, 2004).

Information literacy forms the basis for lifelong learning and enables learners to master control over their own learning, the skill of obtaining, using and conveying information (Association of College and

Research Libraries [ACRL], 2009). Similarly, Demirel (2009) revealed that information literacy is the key term in the realisation of a lifelong learning activity; as the information society consists of individuals who like distance learners learn all their lives. He explained that those who learn all their lives long are able to access easily the information that is needed for solving a problem or taking a decision. Equally, Sacchanand (2002) pointed out that information literacy is considered a survival skill for the new century, the key competency for independent study, self-directed learner (distance learner), lifelong learning and the foundation of a literate society.

Information literacy is the knowledge and skills required to identify information needed to perform a specific task, solve a problem, cost-effectively search for information, organise/reorganised it, interpret and analyse once found and retrieved, evaluate the accuracy and reliability of the information, including ethically acknowledging the sources from where it was obtained, communicate and present the results of analyzing and interpreting it to others, and use for achieving results (Lau, 2006). Similarly, Irving & Crawford (2010) revealed that information literacy is the cornerstone of learning and absolutely essential in this digital age. It supports learning and decision-making in all areas of human activity be it from early years through school to higher education, the workplace, adult and lifelong learning and skills development. They observed that information literacy helps people to develop new skills and make them more employable.

According to Secker (2008), information literacy is all encompassing. It includes the technological skills needed to use the modern library as a gateway to information, enables individuals to cope by providing the requisite skills needed to know when information is needed, where to locate it effectively and efficiently, analyse and evaluate the information thus giving the user (s) confidence in using that information to make a decision or create a product. Similarly, Koneru (2009) confirmed that information literacy empowers learners with the competency

necessary to cope with the complex and changing information and technological environments, and use the information resources effectively.

Information literacy can equally be referred to as the key to understanding and thriving in the information age. Therefore, librarians, faculty and other stakeholders in the education business need to work together as a team to guarantee that students are equipped with the right skills they needed to successfully find, evaluate and use information for academic and decision-making activities. Consequently, with the ever increasing wealth of electronic information resources available at the NOUN library, making learners to undergo information literacy education will go a long way to prepare and equip them to succeed in their academic pursuit, decision-making activities and in their future job opportunities.

The basic concepts of information literacy according to Lau (2006, p.9) include:

- **Information fluency** – This involves the capability or mastering of information competencies.
- **User education** – This entails global approach to teach information access to users.
- **Bibliographical instruction** – It entails user training on information search and retrieval.
- **Library orientation / instruction** – This focuses on library skills.
- **Information skills** – This focuses on information abilities.
- **Information competencies** – This entails compound skills and goals of information literacy.
- **Development of information skills** – This involves the process of facilitating information skills.
- **User Training and other concepts.**

From the foregoing submissions, information literacy can be seen as a shared responsibility for all: librarians, faculty, students, parents and other support staff in the education business because it is the key driver of the 21st Century learning. Also, it creates an awareness of what others

are doing in programs and initiatives. It helps user(s) to navigate their way through diverse sources of information without becoming overwhelmed and overloaded in accomplishing tasks related to research, group presentation, problem-solving and decision-making. In addition, information literacy skill is the critical thinking skill required of all: school, work or personally to be able to function perfectly, effectively and efficiently at whatever task we are saddled with in life.

Basic Elements of Information Literacy

Information literacy is a crucial skill in the pursuit of knowledge. It is on-going throughout a student's academic development and it is inter-dependent with the needs of a discipline area, expectations of faculty and level of program. According to NFIL (2016); Nonthacumjane (2011); Ranaweera (2008) as cited in Bundy (2004); and Lau (2006) the basic elements of information literacy are:

- I. **Generic Skills:** These are general skills which cut across disciplines. They include problem-solving skill, collaboration, team work, communications, critical thinking and critical reading.
- II. **Information Skills:** These are skills vital to success in education, occupation and day to day communication of all citizens. These include information seeking, information use, information technology fluency. Also included is information ethics as it pertains to the issue of copyright, information security and privacy.
- III. **Information Ethics:** This entails using information wisely and ethically, social responsibility, communication participation, values and beliefs.
- IV. **Research and Library Skill:** This involves the ability to search for information in the traditional or virtual library setting with the effective application of the Boolean logic operators.

- V. **Media Literacy Skills:** This is the knowledge and skills necessary to understand all of the mediums and format in which data; information and knowledge are created, stored, communicated and presented such as PDF text format, DVD, JPEG for photos and so on. It includes visual literacy, computer literacy amongst others.

Characteristics of Information literate

Information literacy is a 'way of being' and is a 'process of becoming'. It refers to a set of characteristics that transform an ordinary student into a 'wise information consumer' and 'lifelong learner' (Philadelphia University Library, 2016). Information literate people are those who have learned how to learn. They know how to learn because they know how knowledge is organised, find information and use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand (ALA, 2000).

Information literacy is about interaction of people with information and not about books. It is important and enlightens, and has implication that can impact the lives of many people (Warren, 2011). According to Shane (2011), an information literate person extends beyond school and application to academic problem - such as writing a research paper - and reaches right into the workplace. Equally, the University of California Fact Sheet (2000) as cited in Ranaweera (2008, p.3) stated that an information literate individual should be able to:

- Recognise a need for information.
- Determine the extent of information needed (knowledge of information resources in one's subject).
- Access the needed information effectively and efficiently (ability to construct effective search strategies).
- Evaluate information and its sources critically (ability to critically appraise information sources).

- Incorporate selected information into one's knowledge base (ability to use information sources appropriately, cite and create references).
- Use information effectively to accomplish a specific purpose / task.
- Understand the economic, legal and social issues surrounding the use of information.
- Access and use information ethically and legally.
- Use information and knowledge for participative citizenship and social responsibility.
- Experience information literacy as part of independent learning and lifelong learning.

The Hallmarks of Information literate

Information literacy are set of information skills that can be measured; it is a set of abilities requiring individuals to recognise when information is needed and have the ability to locate, evaluate and use effectively the needed information (Dubicki, 2013, as cited in ACRL, 2000). Invariably, everybody in the society especially students are in need of information literacy skills as they are helpful (in order to succeed academically and in their future job opportunities) and also, teachers, lecturers and other support staff and stakeholders in the education business for them to be able to carry out their occupations efficiently and successfully (Ranaweera, 2008).

The hallmarks of an information literate individual as listed in ACRL (2000:8-14) include the ability to:

- Identify and address information need.
- Access information effectively and efficiently.
- Evaluate and think critically about information.
- Use information effectively for a specific purpose.
- Use information ethically and legally.

Furthermore, Ranaweera (2008) revealed that the key area of information literacy learning are learning how to use information tools to access, organise and distribute data, information and knowledge; learning thinking process associated with knowledge creation; how to communicate with people to access and exchange data, information, learning the intellectual norms of the subject domain. Hence, information literate individuals are expected to be able to use information technologies effectively to find and manage information; critically evaluate and ethically apply that information to solve a problem; apply the spirit of inquiry and perseverance in finding out what is necessary to get the job done (Nonthacumjane, 2011).

From the foregoing, it is observed that information literacy is critically important because individuals are daily surrounded by a growing ocean of information in all formats. Also, it is not surprising to note that not all information is created equal: some are authoritative, current, reliable, while some are biased, out of date, misleading and false (Islam & Tsuji, 2010).. Hence, librarians must not shy away from the fact that the amount of information available is going to keep increasing, and the types of technology used to access, manipulate and create information will likewise expand. To this end, they must be readily equipped with information literacy skills that will help them in dispensing their duties.

Symptoms of Information Illiteracy

Information illiteracy is the inability to realize when one's own knowledge or understanding has reached its limit (Kirinic, 2012 as cited in Zurkowski, 1974). He explained further that information illiterate individuals even though are termed literate in the sense that they can read and write, they do not have measure for the value of information and ability to mould information to their needs. Information illiterate is an individual that argues despite having been proven wrong or does not

realize that he is making a fool of himself when speaking to a room of experts about a topic that he knows little about. Most times, information illiterates are usually unable to see gap or fault in their intellectual reasoning (Mulcahy, 2012).

According to Grassian (2009), an individual can be referred to as an information illiterate if found doing any of the following:

- i. **Using the web indiscriminately for research papers:** There is no one right or wrong way to conduct a web search, hence, there is never a list of definitive steps or one specific strategy to follow when conducting a search. However, it is advisable to think in terms of a toolbox of strategies and select whichever tool or combination of tools that may seem appropriate for a specific search.
- ii. **Not thinking critically:** Critical thinking skills are an important tool, especially when for personal beliefs and academics. It is a powerful defence against ideas and opinions that are wrong.
- iii. **Copying and pasting without citing /citations:** Plagiarism is the act of stating or implying that another person's work is yours. It can range from submitting a paper that was not solely written by you or omitting key citation.
- iv. **Inability to differentiate between scholarly and popular materials:** Scholarly publication is one in which the content is written by experts in a particular field of study for the purpose of sharing original research or analyzing other people's finding. They are subject to peer review before publication. Scholarly work will thoroughly cite all source materials used. On the other hand, popular sources are informal sources that usually contain a wealth of general information. The aim of popular source is to inform a wide array of readers about issues of interest. Examples include news, business and entertainment publication.
- v. **Spending a lot of time helping your students to do information research:** This is a situation in which students are not able to

judge the quality of information available at their disposal swiftly. Hence, such students are greatly lacking in critical research skills. It also involves the inability to learn the nuances of bias, fair use of a given information.

Apart from these five symptoms listed above, others studies such as Mulcahy, 2012; Kirinic, 2012 as cited in Zurkowski, 1974; Warren, 2011) also revealed that information illiteracy symptoms include the inability of a user to determine the nature and extent of information needed; inability to identify a variety of types and formats of potential sources for information; inability to consider the costs and benefits of acquiring the needed information; the inability to evaluate and re-evaluates the nature and extent of the information need; the inability to understand many of the economic and social issues surrounding access to and use of information ethically and legally; no measure for value of information; and lack of ability to mould information to their needs.

Information Literacy Core Competencies

Information literacy competency is the ability to identify an information need, locate, evaluate and effectively use information (George & Frank, 2004). They are a key factor in lifelong learning and are first start in achieving educational goals (Lau, 2006). Information literacy competency extends learning beyond formal classroom settings and provides practice with self-directed investigations as individuals move into internships, first professional positions and increasing responsibilities in all areas of life (ALA, 2000). Unarguably, information literacy competencies assist students in learning to find, use and evaluate information. They are tools used to encourage and facilitate conversation, a guide for staff, student and faculty. They are desirable for all graduates and provide students with a framework for gaining control over how they interact with information in their environments (Franklin, 2009). There are a number of closely related definitions of information competency and information literacy.

These include Horton, Jr., (2012), who stated that information literacy comprises the competencies required to recognize information needs and to locate, evaluate, apply and create information within cultural and social contexts. He explained further that information literacy is crucial to the competitive advantage of individuals, enterprises (especially small and medium enterprises), regions and nations as it provides the key to effective access, use and creation of content to support economic development, education, health, human services and all other aspects of contemporary societies.

According to the ACRL Standard (2000), information literacy skills empower the people with the critical skills which will help them become independent lifelong learners. These skills will enable people to apply their knowledge from the familiar to the unfamiliar. Similarly, Horton, Jr., (2012) explained that information literacy extends beyond current technologies to encompass learning, critical thinking and interpretative skills across professional boundaries, empowers individuals and communities. Unarguably, in an information economy, students will need information literacy skills to succeed in the work force, whether they are creating a marketing proposal for a new product or looking for current medical research to treat a patient.

Basic Skills of an Information Literate

Information literates are individuals trained in the application of information resources to their work. They have learned techniques and skills for utilizing the wide range of information tools as well as primary sources in moulding information solutions to their problems (Kirinic, 2012 as cited in Zurkowski, 1974). The basic skills required to be information literate according to the Chartered Institute of Library and Information Professionals ([CILIP], 2012) entails an understanding of:

A need for information (the ability to articulate a question and so develop a focus for research is an important skill.

Understanding the resources available (ability to identify the resources available, where they are, how to access them, merits of individual resource types and when appropriate to use them).

Understanding how to find information (ability to search appropriate resources effectively and identify relevant information). An information literate person would also understand that in addition to purposive searching, information can be acquired by browsing, scanning and monitoring information sources.

Understanding the need to evaluate results (ability to evaluate information for its authenticity, accuracy, currency, value and bias and the means by which the results were obtained in order to ensure that the approach did not produce misleading or incomplete results).

Understand how to work with or exploit results (analyse and work with the information to provide accurate presentable research results or develop new knowledge and understanding).

Understand ethics and responsibility of use (know why information should be used in a responsible, culturally sensitive and ethical manner). Respect confidentiality and always give credit to other people's work.

Understand how to communicate or share your findings (ability to communicate/share information in a manner or format that is appropriate to the information, the intended audience and situation).

Understand how to manage your findings (know how to store and manage the information you have acquired using the most effective methods available).

Generally, librarians always emphasise information literacy competencies as the primary skills required by students, faculty, researchers and other stakeholders to survive in this electronic information age. Hence, information literacy competency skills need to be developed over time and practiced throughout a student's program of study. Consequently, the onus lies with the relevant stakeholders to ensure that only well trained librarians are saddled with the responsibility of impacting and implementing information literacy skills training programmes on students and other library patrons.

Components of Information Literacy for NOUN Learners

The open and distance mode of learning pioneered by the National Open University of Nigeria, in Nigeria is 2003 was established to provide quality, cost-effective and flexible learning through a comprehensive reach that transcends all barriers (Ofole, 2015). It is an amalgamation of approaches with focus on open access to education and training provision. This approach to learning frees learners from the constraints of time and place, offers flexible learning opportunities to individuals and group of learners (Ofole, 2015). According to Sacchanand (2002), open and distance learning is self-directed, collaborative, intertwined with personal life and work, and is more resource-based. He explained further that open and distance learning education calls for perpetual access and usage of information and learning resources.

In NOUN, information is made available to the students through several media such as CD-ROM, online databases, students' portal, NOUN Website, notice board amongst others. Invariably, information literacy skills are important in open and distance learning education as these skills will help students to develop the confidence to work on their own because technological advancements have resulted in the over abundance of information and these has left users overwhelmed. It is imperative for librarians in this ever changing world of technology, to work in conjunction with other relevant stakeholders to play a pivotal

role in advocating and fostering information literacy skills development programs.

In developing information literacy skills programme for NOUN library users, it is essential for academic, stakeholders and other support staff to be fully engaged in and exploit available library resources in the distance learning system. Doing so will help them to develop their own information literacy skills and also makes them more likely to see the value of building these skills into their courses for students.

The components information literacy skill training program for NOUN library users might include:

- Adequate knowledge of the range of information resources (e-books, e-journal, subject databases) available in both the traditional and virtual library, encourage them to build an online reading list and add stable links to electronic journal articles.

- Designing, developing and incorporating information literacy instructions in collaboration with the faculty, instructional designers and developers in the course materials and be made available and accessible to learners in various forms and formats, depending on the availability of physical, human and monetary resources.

- Helping NOUN learners cope with the escalating complexities that change in technologies and the information environments put forth.

- Dedicating time to discuss how students and other patrons should evaluate materials gathered in order to select the most appropriate information needed for research assignments such as seminar papers, research project proposals.

Organise mandatory information literacy workshops for all incoming freshers, transfer students and refresher course for other students at the Study Centre level.

The essence of information literacy for NOUN library users is to ensure that library patrons (students, faculty members, and other relevant stakeholders) make a success of their academic, research and career pursuit where information is needed and used on a daily and regular basis. The absence of, or lack of information literacy skills amongst distance education learners may portend a great havoc and adversely affect the success being made by NOUN teeming population in their academic pursuit.

Importance of Information literacy to NOUN Library Users

The National Open University of Nigeria, a renowned and foremost open and distance learning establishment in Nigeria and a member of the open educational resources (OER) in Africa has a rich repository of information resources comprising of journals, books, specialised subject databases, reference databases, and general data amongst others that are remotely accessible and available to users. Undoubtedly, the teeming population of students of this great institution need the same library support services and collections as provided to the on-campus students. Hence, as distance learners they need skills to cope with the technology-based medium required to access information, instructions, examinations, course materials and to receive services such as I-learn facilitation, reference assistance, and information network connections.

To this end, it is of utmost importance for NOUN learners to be information literate because

Information literacy skills will promotes in them problem-solving approaches and thinking skills, finding information, forming opinions, evaluating sources and making decisions, fostering

successful learners, effective contributors, confident individuals and responsible citizens.

It is essential for NOUN library users to be able to relate to computers, software applications, electronic information resources (subject databases, journals and books) and the Internet. Proficiency in information literacy skills will avail them the opportunity to master effectively the use of these new tools to their benefit.

Inculcating information competency skills on NOUN learners and patrons will help equip them with the right skills needed to use the Internet productively as information sources.

Inculcating information competency skills on NOUN learners and patrons will equip them with the right skills needed to navigate the turbulent world of information successfully so as not to be overwhelmed and overloaded due to the proliferation of electronic resources, explosion of information output and sources. Such skills will help learners to know when information is needed and where to locate it effectively and efficiently

Information literacy education is essential for NOUN learners as it will equip them with the critical skills necessary to become independent lifelong learners because most of today's learners, even though are technologically literate and are digital natives, they are sadly information illiterate and are not digitally literate (Warren, 2011).

In the information world, not all information is equally authoritative, current and reliable; some are biased, out of date, misleading, controversial and false. These circumstances create challenges for both information professionals and students who deal with

information in all its spheres, hence the need for NOUN learners to be imbued with information literacy skills (Islam & Tsuji, 2010).

Role of NOUN Library

The library is the information reservoir of the National Open University of Nigeria where information resources in multiple formats are kept. It is a department equipped with computer access, processing and communicating knowledge and a gateway to the Internet world. The NOUN library is a learning space and knowledge socialization centre with information professionals (librarians) as consultants. The library serves as the repository of knowledge and the hub of information literacy education programme. Therefore, in developing a successful information literacy programme for the teeming population of open and distance learners of this institution, the onus lies with:

- The library management and librarians to collaborate closely with faculty members and course developers by ensuring that the vocabularies used in knowledge impartation are understood by all rather than using terminologies that are known only to the profession (librarians) to prevent ambiguity in learning misunderstanding or outright lack of knowledge about the term itself as their readiness in cognitive, functional and technical aspect of information search will enable them to be skilled in developing competency skills in their patrons.

- NOUN library management is expected to be at the forefront of mounting and organising information literacy education programmes for its diverse users through periodic training and workshops across study centres and partnering in the formulation of authentic assessment tasks which address information literacy learning outcomes and behaviours.

- The Library management should ensure that librarians are regularly exposed to further training in order to enhance and update their skills so as to be able to effectively implement and impact the library patrons with the requisite information literacy skills and competencies needed to navigate through the ever changing world of information.

- NOUN library management should be ready at all times to provide regular in house- training for patrons to update and empower them with basic information literacy skills in distance learning system.

- The library should in conjunction with faculty incorporate web-based tutorials into the I-learn facilitation platform for the students in order to get them introduced to the virtual library and master how to find books, articles, subject guides, as well as help with the issues relating to proper citation, fair use and how to avoid plagiarism.

- To make NOUN students, faculty and other stakeholders consumers of information, information literacy instructions should be integrated with the course curricula or library instructional program.

- The Library management in collaboration with the faculty should encourage the incorporation of Web-based information literacy instructions programme into the students' curricula. This will ensure flexible content management, integration and customisation of information literacy modules in varying levels and format.

- The library management must ensure that information literacy skills programme include knowledge about copyright and licensing arrangements for electronic resources. The users need guidance

and support about issues such as which resources are licensed to allow downloading for use in the virtual learning environment.

NOUN library management should provide expert advice on integrating and embedding information literacy proficiencies in curriculum design and provide leadership in the development of discipline-based activities for information skills.

Unarguably, NOUN library is strategically positioned to support research and learning through informal and formal relationships within the university and information literacy is inherent in quality research outcomes. Hence, the library is expected to undertake a leading role in the development and implementation of initiatives which on the long run will promote information literacy within the framework of academic programme as a set of key skills for lifelong learning. In addition, with the university's study centres spread across the entire nation, the library management should ensure that uniform and effective library support services are made available at the study centre level to cater for the needs of students.

Role of NOUN Librarians

Developing information literacy education, awareness and skills could be an innovative way to help people identify when information is needed and to locate, evaluate and use the needed information effectively (Islam & Tsuji, 2010). Lau (2006) noted that the development of such competencies should take place throughout citizens' lives, especially during their educational years, where librarians, as a part of the learning community and, as experts in information management, have or should assume the key role of facilitating information literacy. Librarians are referred to as information literacy specialists and are expected to breakdown the vertical barriers to learning to work horizontally across all areas of learning and connects the dots for the students, faculty, parents and community (Warren, 2011). Hence, librarians should be knowledgeable in information literacy and constantly update their

personal skills in order to work effectively and efficiently with faculty, students and other stakeholders in the education business in order to assist them with information search related issues.

Unarguably, open and distance learning allows for flexibility and accessibility, hence, librarians in NOUN must equally be open minded, flexible, visionary, confident and be focused in connecting users to the library as information rather than as a place. Librarian should embrace their new found role as part of the learning support and emphasis to faculty and stakeholders the importance of information literacy competencies to open and distance learners as the primary skills needed by researchers in this electronic age and that the skills need to be developed over time and practiced throughout a students' program of study. Librarians, through the creation, with faculty, of curriculum-integrated programs, partnering with course developers and facilitators, should actively contribute to the students' learning processes in their search to enhance or develop the skills, knowledge and values needed to become lifelong learners. They should start by teaching users' skills such as searching the online databases, formulate Internet search strategies and use a variety of subject specific databases and electronic resources in order to provide open and distance learners with the same opportunities as on-campus students so as to develop these information literacy skills.

NOUN librarians are expected to communicate effectively with library users and patrons in order to create a supportive reading and learning culture among our students. This can be done through email notices, students' portal, marketing brochures to educate and network with faculty and other stakeholders. NOUN librarians are to play a consultative role by helping other departments and units to develop their own information literacy programs

With the wealth of electronic information resources available in NOUN library, conducting an information search can be overwhelming

for both faculty and learners, hence, librarians are expected to provide the needed guidance in the use of these resources so that they can develop their information literacy competencies. They are expected to offer instructions in a variety of formats suitable for distance learners to assist them through Web based tutorials to introduce learners to research techniques and use of specific resources and the faculty members are to work in consultation with NOUN library staff (available to provide necessary support for building skills in the area of accessing information effectively through instruction programme) so as to ensure that the student body acquire the requisite skills that will help them in their studies and even in their work life.

NOUN librarians should be well equipped with information literacy and instruction skill, excellent communication and interpersonal skills, information search skills, both in the traditional and virtual library, skill in the use of emerging technologies, verse in reference services activities and instructions so as to be able to attend effortlessly to the information needs of our users.

Furthermore, NOUN librarians are available and must be ready to assist faculty in mapping information literacy competencies onto an existing departmental curriculum, or to work with departments to build those sequenced competencies into a revised curriculum; teach information literacy skills to their students in a number of ways. These methods, which can be combined, will include:

- Collaborating with faculty to create effective research assignments.
- Creating exercises for faculty to assign to students to teach information literacy concept.
- Creating course research guides for a specific assignment.
- Library instruction sessions through the I-learn platform with online tutorials tied to course content.

Involving librarians in online course development.

One of the basic issue is that considering the importance of information literacy to the total development and wellbeing of an individual; the fact that learning starts from the cradle to the grave as there is no end to the learning process, it is expected that librarians generally, being an important stakeholder in the knowledge / education business should be readily equipped for the challenges ahead in the field of Information management and Users' studies. Librarians must be ready to spearhead the campaign of impacting information literacy skills on learners' right from the kindergarten. It may be far too dangerous to wait till secondary level or else, if adequate care is not taken and necessary measures put in place, the larger society will not only be full of information illiterate individuals but also of professional that lacks information literacy competencies skills. If the society ever gets to this level, it will portend a great danger for the upcoming generation.

Conclusion

With the rise of the Internet and web technology, access to information has improved greatly. However, to assume that because information is available on the web, distance learners will have the skills and knowledge to find, access, evaluate and use it effectively is absurd. In this respect, librarians generally and at the National Open University of Nigeria in particular has important role to play in motivating of library users and making information literacy education both timely and relevant to them; assist them to find quality resources in whatever format they exist.

Librarians are no longer just the guardians of books, but information providers in an environment that is constantly changing and where the information needs to be gathered quickly and effectively. Nevertheless, the mission of librarians is to promote services for the ever increasing volume of information. To this end, on a regular and continuous basis, Librarians are to update their skills to enable them foster changes

in the ever changing technological world on which open and distance learning is anchored. Conclusively, in the words of Secker (2008), librarians need to work in partnership with learning technologists, instructional designers, IT staff and education staff so as to be clear about the unique and highly relevant skills that these sets of professionals has to offer because our ability to teach information literacy skills to learners and faculty alike is to ensure our central role in the university setting. Practice is the key to learning and developing competencies information literacy skills. Hence, if these skills are utilised regularly, and students made to learn information literacy skills from the onset of their programmes, high competency information literacy level will be achieved among NOUN learners.

References

- Adetimirin, A. and Omogbhe, G. (2013). Library Habits of Distance Learning Students of the University of Ibadan, Ibadan, Oyo State, Nigeria. *Library Philosophy and Practice* Retrieved from <http://unlib.unl.edu/LPP/>.
- American Library Association (2000). Information Literacy Competency Standard for - Higher Education. Retrieved from <http://www.ala.org/acrl/standards/informationliteracycompetency>.
- American Library Association. (1989). *Information literacy*. (American Library Association. Presidential Committee Final report). Retrieved from <http://www.ala.org/ala/acrl/acrlpubs/whitepapers/presidential.cfm>. Chicago, U.S.A: Author.
- Association of College and Research Libraries. (2009). *Information literacy competency Standards for Higher Education* Available at Retrieved from <http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.cfm>.
- Association of Modern Technologies Professional. (2016). *Information literacy*. Retrieved from <http://www.itinfo.am/eng/information-literacy/>.
- Charetered Institute of Library and Information Professionals. (2012). *Information literacy skills*. Retrieved from <http://www.cilip.org.uk/sites/default/files/documents/Information%20literacy%20skills.pdf>.
- Demirel, M (2009) Lifelong learning and schools in the Twenty-first Century. *Procedia Social and Behavioural Science* 1. 1709 -1716. Retrieved from www.sciencedirect.com.

- Dubicki, E. 2013. Faculty perceptions of students' information literacy skills competencies. *Journal of Information Literacy*, 7(2), pp. 97-125. Retrieved from <http://dx.doi.org/10.11645/7.2.1852>
- Fabbro, E. (2004). Information literacy: Learning how to learn. Retrieved from <http://aupac.lib.athabascau.ca>
- Fang, X.S (2006) Collaborative role of the Academic Librarian in distance learning: Analysis on an Information Literacy Tutorial in WebCT. *Electronic Journal of Academic and Special Librarianship* 7(2) Retrieved from http://southernlibrarianship.icaap.org/content/v07n02/fang_x01.htm.
- Franklin, K.Y. (2005, April). *The importance of information literacy: Insights from the next generation of scholars*. ACRL Twelfth National Conference. 7-10 April, 2005.
- Fry, K., Malone, B and Kathee, R (2014) Distance learning: Bibliographic instruction in academic settings. Retrieved from <http://jan.ucc.nau.edu/~kjr/bikathreewebpage.overview> of issues:
- George, L. & Frank, I. (2004). Beyond books: Library services to distance education students. In Brinley, J et al eds. *Learner support in open, distance and online learning environment*. AFS: 9. 135-144. Retrieved from www.c31.uni-oldenburg.de/cde/support/fa04/vol9chapters/GeorgeFrank1.pdf
- Grassian, E. (2009). Teach information literacy and critical thinking. Retrieved from <https://sites.google.com/site/teachinfolit/>
- Horton, Jr., F. W. (2007). *Understanding Information Literacy: A Primer*. France: United Nations Educational, Scientific and Cultural Organization. Retrieved from www.unesco.org/communication/Documents/157020E.pdf

Igwe, U.O. (2009). Libraries without walls and open and distance learning in Africa: The Nigerian experience Retrieved from www.wikieducator.org/images/9/95/PID_399.pdf.

Irving, C. & Crawford, J. (2010). Scottish Information Literacy Project: The right information. Retrieved from <http://www.caledonianblogs.net/information-literacy/>

Islam, M.A & Tsuji, A (2010). Assessing information literacy competency of Information Science and Library Management graduate students of Dhaka University. *IFLA Journal* 36: pp.300-316. Retrieved from <http://ifl.sagepub.com/content/36/3/300>.

Kirinic, V. (2012) Information literacy: definitions, standards and assessment, related concepts. Retrieved from https://static.uni-graz.at/fileadmin/sowi-institute/informationwissenschaft/skripten/information_literacy.pdf

Koneru, I. (2009) Designing information literacy modules for distance learners in India. *Asian Journal of Distance Education*. 7(2), Retrieved from <http://www.aisianjde.org/2009v7.2.Koneru.html>.

Lau, J. (2006). Guidelines on Information Literacy for Lifelong Learning. IFLA. 60pp. Retrieved from www.ifla.org/publications/guidelines-on-inf. Retrieved May 25, 2016

Mulcahy, K. (2012). 20 types of illiteracy. Retrieved from www.listverse.com/2012/04/04/20-types-of-illiteracy

National Forum on Information Literacy. (2016). *Information literacy skills*. Retrieved from <http://infolit.org/information-literacy-projects-and-programs>.

Nduka, S.C (2013) Library services to Distance Learners: The experiences of University of Lagos. *PNLA Quarterly*. 77(2), 46-57. www.cdlponline.org/inde.cfm?fuseaction=what

- Nonthacumjane, P. (2011) Key skills and competencies of a new generation of LIS professionals. *IFLA Journal*, 37, 280-288. Retrieved from <http://ifl.sagepub.com/content/37/4/2/doi:10.1177/0340035211430475>.
- Ofole, N.M. (2015). Eleven years of implementation of open and distance education: National Open University of Nigeria's scorecard. In O.A. Moronkola, C.O.O. Kolawole, B.O. Asagba, J.O. Osiki, & A. Jaiyeoba (Eds.), *Educational theory and practice across disciplines: Projecting beyond the 21st Century* (pp.508-528). Ibadan, University Printery.
- Radniecki, T. (2013). Study on emerging technologies librarians: How a new library position and its competencies are evolving to meet the technology and information needs of libraries and their patrons. Retrieved from <http://creativecommons.org/licenses/by/3.0/>
- Ranaweera, P. (2008). Importance of information literacy skills for an information illiterate Society. Retrieved from <https://core.ac.uk/download/pdf/11884153.pdf>.
- Sacchanand, C. (2002, August). *Information literacy instruction to distance students in higher education: Librarians 'key role*. Paper presented at the 68th IFLA Council and General Conference, Glasgow. Retrieved from www.citeseerx.1st.psu.edu/viewdoc/download?doi=10.1.1.105.537&rep=rep1&type=edu.
- Secker, J. (2008). E-learning and information literacy. Retrieved from <http://eprints.lse.ac.uk/4884>.
- Shane, J. (2011). Why is Information Literacy Important? Retrieved from https://www.philau.edu/infolit/why_students.htm.

- Shenton, A.K. (2009). Information literacy and scholarly investigation: a British perspective. *IFLA Journal* 35, 226-231 Retrieved from <http://ifl.sagepub.com/content/35/3/226/doi:10.1177/0340035209346219>.
- Shyh-Mee, T., Kiran, K, & Diljit, S. (2015) Examining school librarians' readiness for information literacy education implementation. *Malaysian Journal of Library & Information Science*, 20(1). 79 - 97.
- University of Idaho (2014). Information Literacy Portal: UI Core Curriculum. Retrieved from http://www.webpages.uidaho.edu/info_literacy/
- University of Philadelphia (2016). What is information literacy? Retrieved from http://www.philau.edu/infolit/why_students.htm.
- University of Texas at Austin (2014) *Information literacy competency*. Retrieved from <http://www.usc.edu.au/university/library/about-the-library/information-literacy-strategy>.
- Warren, G. (2011). Information illiteracy: a national pandemic. Retrieved from www.literacy2.0.com/2011/03/information-illiteracy-a-national-pandemic