Provision of Library Services for Quality Information Literacy in Emerging Knowledge Society: The Case of Nigerian Academic Libraries

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Abstract

Rationale of Study – The emergence of a knowledge society driven by ubiquitous information and Information Communication Technology (ICT) has made knowledge to become the key resource facilitating the creation of new economic and social configurations. The challenge of managing abundant information available far and wide in a knowledge society finds most people unequipped with appropriate knowledge and skills. This, therefore, requires information literacy skills to cope with the challenge. The paper examines the provision of library services towards the improvement of information literacy in emerging knowledge society.

Methodology – This study conducted a systematic literature review using classical approach. It explores scholarly databases including Google Scholar, ERIC, Science Direct and other institutional databases for literature search. Systematic search was carried out with key-word and title search synthesis in order to select and review the existing literature.

Findings – Findings indicate that information literacy being a strong pillar of a knowledge society is central to educational and national developments. Hence, quality information literacy curricula and improved information literacy service by academic libraries. Also, library well-funded with modern ICT tools and information experts have the potential to foster information literacy in knowledge society through their services.

Practical Implications – The findings of study would enable stakeholders in education sector and other related agencies to support libraries objectives in imparting information literacy education by formulating educational policies that give room for information literacy education, review information literacy curricula for academic libraries, as well as support library at all levels with funds to run information literacy initiatives and programmes.

Originality – This is a conceptual review paper where scholarly literature on provision of library services for quality information literacy in Nigerian academic libraries were systematically analysed and relevant cited headings adopted.

Keywords

Library services, Librarians, ICT, Information Literacy, Knowledge Society, Academic library, Nigeria

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1 Introduction

Human's quest for knowledge has led to the creation and accumulation of tremendous amount of information. The ubiquity of information as well as the emergence of ICT in the management, access and use of information gave birth to the knowledge society (Moruf, 2020). Anderson (2008) defined knowledge society as an association of people with similar interests who try to make use of their combined knowledge. It may exist on a global, national, organisational, professional or socio-cultural level. In the past, the Nigerian education sector was the envy of other nations, owing to its well-equipped institutions as well as well trained and motivated teachers whose expertise in imparting the right knowledge ensured that Nigerian universities churned graduates who could compete with their contemporaries anywhere around the world without any difficulty (Uche-Okobi, 2015; Omeluzor & Ogo, 2018).

To function in the emerging knowledge society, an individual is expected to be an independent lifelong learner, able to master higher-order talents as well as possess the capabilities of a skilled worker through information literacy education (Mioduser, Nachmias & Forkosh-Baruch, 2008). Hence, individuals in societies feel compelled to adjust to rapid change of information landscape as this finds most people unequipped with the appropriate tools. Mioduser *et al.* (2008), however, identified seven literacies for the knowledge society as relating to:

- Multimodal information processing This encompasses the skills and knowledge required to understand, produce, and negotiate meanings in a culture made up of words, images, and sounds.
- 2. **Navigating the infospace** The ability to recognise the need for information; locate, and retrieve it from the vast infospace; as well as the capability to decode, evaluate, use, and communicate it in an efficient and ethical manner.
- 3. Interpersonal communication This literacy relates to the skills required for mindful, knowledgeable, and ethical use of a wide range of communication means and channels, using various interaction configurations (such as one to one, one to many, many to many), for different purposes.
- 4. **Visual literacy** The ability to decode, evaluate, use, or create images of various kinds using both conventional and 21st century media to advance thinking, reasoning, decision making, communication, and learning.
- 5. **Hyper-literacy (hyperacy)** This literacy refers to people's ability to deal, either as consumers or as producers, with nonlinear knowledge representations.

- 6. **Personal Information Management (PIM)** The process by which an individual stores his/her information items (such as documents, e-mail, Web favourites, tasks, contacts) to retrieve them later on.
- 7. **Coping with complexity** This literacy encompasses the skills and methods required to perceive, study and understand complex phenomena (such as recognising multiple actors or multiple layers, or emergent behavioural patterns) as well as coping with them.

Knowledge society and information society have been used interchangeably to describe a knowledge economy which necessarily depends upon information as well as the intellectual capital of economic communities. A knowledge society is said to presume an information society, but not the other way round (Tiwana, 2002; Anderson, 2008). While distinguishing the two concepts, Anderson (2008) associated information society with an explosion of information and information systems, and knowledge society primarily referred to economic systems where ideas or knowledge functioned as commodities. Knowledge society is characterised by democratisation of information (making information available and accessible to everyone) through technology. This is sometimes referred to as information explosion, hence the dire need for information literacy skills to navigate the diverse information environment. Chartered Institute of Library and Information Professionals (2018) has defined information literacy (IL) as the ability to think critically and make decision about how to find and use information. IL is therefore central to the growth of a knowledge society as it enables critical thinkers who are conscious of their information environments in order to develop informed views and to engage fully with society.

There is a growing concern in the minds of people on the relevance of the library in the 21st century (Omeluzor & Ogo, 2018). The library is a service delivery institution, a custodian of knowledge and a centre for information literacy programme (centre for learning information literacy skills). Traditionally, library is a place where information are acquired, stored and retrieved for use and such information if well applied could modify user's information literacy skills for societal growth (Ajegbomogun & Ajegbomogun, 2015). Information literacy skills are a set of competencies acquired through library services such as bibliographic instruction, digital literacy instruction, copyright literacy, and media literacy (Chakrvarty, 2008). Hence, the services of a good library are indispensable if quality IL in emerging knowledge society is to be achieved.

In light of the above, this paper offers insights into the provision of academic library services towards improving information literacy in the emerging knowledge society. To achieve this, the paper emphasises the importance of information literacy in service provision by Nigerian academic libraries, reviews library and information science professionals' role in information literacy, and

examines the need to revise information literacy curriculum (if any) for academic libraries in reforming Nigerian education system.

2 Research Methodology

This study adopted a classical systematic approach (Greenhalgh, Thorne, & Malterud, 2018) by conducting systematic literature review. Educational databases and search engines including Science Direct, ERIC, Ebscohost, Science hub as well as Google Scholar were consulted. Literature search was conducted with keywords and title search using Boolean operators. Scholarly journal articles, books, conference proceedings and online resources were specifically selected based on relevance to the topic. Literature obtained were systematically analysed, relevant headings were adopted and cited afterward.

3 Conceptualisation of Information Literacy in Knowledge Society

Knowledge society is impossible without information society mediated by new information technologies. According to the interpretation of UNESCO, Information Society is a "building block of a knowledge society" (Kneževic, 2013 p. 63). In the age of information technology, information literacy (IL) demands a larger presence. IL is key for socio-economic development by inculcating sustainable learning habits of self-motivation, independence, self-actualisation through willingness to learn, curiosity and positive critical thinking. According to Leininger (2012), Internet and information overload makes IL skills necessary for intelligent and ethical use of information communication and technology by people. Talisayon, Boom, Sobel, Bodda, Jun Tian and Anderson (2007) explain that technology and IT skills are insufficient without critical thinking, independent problem solving, updating information skills, teamwork and independent work.

Definitions of information literacy according to Kneževic (2013) include the following elements:

- 1. ability to effectively search for information;
- 2. expertise when selecting and evaluating information;
- 3. ease of use of a wide range of media;
- 4. awareness of the problem of reliability and credibility of information; and
- 5. efficiency of information transmission to the others.

IL has been known by many different names: library orientation; bibliographic instruction; user education; information skills training (Bawden, 2001). However, Information Literacy deals with the ability to access, evaluate, organise and use information in order to learn, solve problems, makes decisions in formal and informal learning contexts, at work, at home and in educational

settings (Chakrvarty, 2008). IL's two important roles are of developing learning abilities which translate to skills for informed individuals and developing work-based competences that impart sustainable learning (Ahmed, 2017). IL encompasses basic literacy, library literacy, media literacy, computer literacy and digital literacy (Bawden, 2001; Chakrvarty, 2008). Of all the kinds of literacy, library literacy is extremely important to be left to chance because it champions and advocates for all other type of literacies.

IL is becoming a strong pillar of knowledge society. Some of the benefits information literacy skills would offer a knowledge society as highlighted in the literature (Breivik & Ford, 1993; Bawden, 2001; Alexandersson & Limberg, 2005; Chakrvarty, 2008; Anderson, 2008; Horton, 2008) include:

- 1. Greater independence leading to self-sufficiency;
- 2. Improve access or connection to information to aid the process of research;
- 3. Enhance professional development in the area of research and information skills;
- 4. Improve quality of information outputs and effective sharing of information;
- 5. Reduce duplication of information and encourage more effective use of information across board;
- 6. Improve information flow used in decision making process;
- 7. Improves the research capability of organisation;
- 8. Transferability of information skills to work-based context that enhances employability;
- 9. Ability to retrieve information and interpret it using a variety of media and output formats;
- 10. Improves learners' confidence and ability to learn independently; and
- 11. Increases individual ability to think critically, interpret information and make informed decisions.

4 Library Services in a Knowledge Society

The digital age has brought about a completely different way of providing library services resulting to the development of new services. More so, the implementation of modern technologies in library work has broadened the provision of library services. Andreadis, Barth, Cochrane and Greever (2007) posit that many library managers believe technological advances make it possible for libraries to offer new services. As library technologies are solving new information needs and changing the mode of service dramatically. Hence, the need to streamline processes to serve changing needs of users. User service is the primary mission of a library, and the development of

the library is driven by users' needs which are affected by the changing environment (Han & Goulding, 2003).

Libraries are at the centre of education while education is an integral part of a nation's general progress because it is the greatest tool for human efficiency and development (Odusanya & Amusa, 2002; Adigun, Ojo, Salvador-Olayokun, Yewande, Abdulazeez & Babatunde, 2011; Moruf 2015). According to Fatemah, Farhard and Akran (2009), information is a crucial factor in national development and the ability to use information tools is considered a source of power. Therefore, the library plays an important role in imparting quality information literacy education through its services. Ezimwanyi (2011) stresses the active role of libraries in the information society. He states that they build capacity through effective use of information literacy and providing support and training for effective use of information resources including information communication technologies. This view was supported by Ameh (2015) who postulates that access to modern information technology is currently one of the most attractive library services in information age. He further argued that mass literacy empowerment is the only tool for sustained national development. Thus, people in the rural and urban communities in Nigeria are in urgent need for relevant, efficient and current information resources, because it is a catalyst for overall development. No system of education will rise above its level of library. Thus, the quality of every education depends largely on the quality of libraries.

The quality of a library is not determined by its size, number of staff or collections but by the highly-valued services that are able to have impact (Moruf & Muhammed, 2015). Though, the micro-evaluation of libraries has given countless opportunities for detailed studies, but still lacking are agreed-upon and objective ways to measure and incorporate library value into such processes as academic accreditation, educational assessment, and ratings of graduate programmes (Weiner, 2005; Pritchard, 2018). However, assessment of library value should go beyond processes such as academic accreditation, educational assessment, and ratings of graduate programmes but should involve the overall impact on individual learners and their value-added contribution to society. Pritchard (2018, p. 5), states that libraries are "well positioned to take leadership roles in the effort to educate good digital citizens".

The library as part of the education process is a useful tool of societal development. The improvement that is expected in the educational system can be obtained through library services. Learning can be aided through effective use of library by students who are regarded as future leaders. According to Adegoke, Fijabi and Bamidele (2014), the Nigerian educational system continues to attract the attention of stakeholders because it needs transformation due to its

declining state. The library as an established institution within the educational framework can play a vital role in the transformation being envisaged in the educational sector. The value and quality use of the library system can bring enormous educational development. However, this must be harnessed if the desired transformation is to be achieved.

Therefore, to keep pace with digital change and meet the demands and expectations of library users in a knowledge society, International Federation of Library Associations and Institutions (IFLA) global vision action plans launched in March 2019 highlighted actions that improve library services to include updating the traditional roles and keeping up with ongoing technological changes; understanding society needs better; and designing services for impact among others (Leitner, 2019). The global vision action plans will serve as a source of inspiration for libraries and information professionals to equip individuals in societies through information literacy education for the desired knowledge societies.

5 Information Literacy in Nigerian Educational System

Library associations in Nigeria are yet to formulate or adopt a national IL standard that will help the citizens develop information skill competencies that are required to survive in the knowledge society (UNESCO, 2005). The only official support for IL related activity is indicated in National Universities Commission (NUC) Benchmark Minimum Academic Standards for Undergraduate Programmes (National University Commission, 2007), where a two credit unit was assigned to Use of Library, Study Skills and Information Communication Technology (ICT) under the General Studies programme (National University Commission, 2007). However, universities are yet to fully implement this policy to develop formalised embedded information literacy education. Attama and Igwe (2015) described IL education as a missing issue and neglected ingredient in the educational system of Nigeria in the 21st century. They also noted that the teaching of Use of Library as an insignificant part of Use of English is not only out-dated, but also no longer acceptable in this era. They noted that the worrisome aspect of this is that librarians of some universities and polytechnics are not even given the opportunity for its delivery; rather both Use of English and Use of Library content are left in the hands of English lecturers to teach.

The library has the potential to offer a solution to challenges posed by educational reform through information literacy service. Hughes, (2000) pointed out the increasing competition in the delivery of information services for higher education with the implication that the library may lose its monopolistic position in the provision of information services. Nevertheless, the library will continue to be a supporting institution on which quality education can be laid (Adegoke *et al.*, 2014). Hence, IL can be an important tool for transforming educational system in Nigeria.

According to Breivik and Ford (1993), IL movement grew out of the educational reform movement of the 1980s, when reports ignored the library and its relationship to today's information society. To sustain this legacy, library needs to redefine their roles as prime mover of IL.

IL generally known as library user education taught in higher institution are set of instructions designed to enable individual learners recognize the value of information and use it to make informed choices in their personal, professional and academic lives (Applegate, 2009). IL is said to be critically important to every nation, its institutions, and its citizens, in order for them to perform competitively and productively in a digital world and a 21st Century Global Information Society, as it promotes greater social inclusion, freedom of expression and opinion (Horton, 2008; Pilerot & Lindberg, 2011). In the opinion of Sîrb (2017), for libraries to continue to play a significant part in building users' education, digital libraries will also have to embrace content that traditional educational institutions might have considered too informal.

Since libraries at all levels of education form part of the educational process, it is imperative to inculcate IL programmes into basic education curriculum so as to inculcate life-long learning skills even outside and after formal certification/education. IL is one of the core services of libraries; it includes technological skills needed to use the modern library as a gateway to information (Tait, Martzoukou & Reid, 2016). IL equips individual with the critical skills necessary to become independent lifelong learners. Explosion of information through the internet has become a challenge to the knowledge society, and learners are not getting enough IL skills capable of facing the challenges. Hence, to give them a strong foundation of IL skills a parallel curriculum in IL is a must at all levels of education, from primary to tertiary through the provision of well-equipped libraries and competent information professionals (Tait *et al.*, 2016). IL must therefore embrace the notion of acquiring practical wisdom, not just theoretical information.

Competencies in IL are key factors in lifelong learning as well as significant to guarantee quality education. They are the first steps in achieving educational goals which in turn translate to societal goals. Breivik and Ford (1993, p. 99) stated that;

"An information literate citizenry will be key to addressing many of the social and economic ills which plague our nation today. Unemployment, high school dropouts, teenage pregnancy, low self-esteem, poverty, and bleak economic development can in some way or another be traced back to a lack or inadequacy of vital information needed to make an important decision in one's personal or professional life".

This assertion was supported by Chakrvarty (2008) which reiterates that the development of IL 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 IL. With IL competencies, individuals will be equipped to take advantage of the opportunities inherent in the global information society.

Library user education or IL instruction has opportunities to diagnose the existing range of learners' IL experiences; deepen those experiences with which they are familiar; encourage them to explore previously unfamiliar experiences; as well as apply the skills learned through study, workplace, and everyday life contexts. The schools must understand that IL is not teaching a set of skills but rather a process that should transform both learning and the culture of communities for the better through the process of constructive alignment (Applegate, 2009). He further reiterates that an IL programme implemented in the curriculum must include resources to facilitate the learning of specific skills (web-based information skills enhancement packages or self-paced instruction). It should provide opportunity to learn specific skills, either early in a course or at the point of need. This will facilitate engagement in learning activities that require ongoing interaction with the information environment. Finally, the curriculum should provide opportunities for reflection and documentation of learning about effective information practices.

IL learning should not be viewed as some kind of invisible and intangible "by-product" of the education process that exclusively, or mainly, emphasises acquiring (memorising) subject-matter content in science courses, the arts, the humanities, and so on (Horton, 2008). Rather, it should be focused on and treated both as a discrete element of the educational curriculum and as an integral component of individual course syllabi. When ministries of education, national educational systems, school policies and curricula, and school boards come to that realisation in both formal and non-formal educational settings, then they will be able to effectively introduce the concept of IL into the educational process (Tait *et al.*, 2016). Therefore, policymakers and executives should consider formulating IL policies as well as implementing programmes and projects in learning and education arenas for which they are responsible in order to create an information literate society.

The state of educational system in Nigeria is at low ebb (Adegoke *et al.*, 2014). Therefore, the development sought in the Nigerian educational sector will be dependent on how actively the library can provide quality information literacy service.

6 Role of Library and Information Science (LIS) Professionals in Imparting Information Literacy

The role of library and information science (LIS) professional in enabling the information literacy campaign is rooted in the concepts of library instruction and bibliographic instruction. In a knowledge society branded with Internet age, Mitrano and Peterson (2012) agreed with the submission by Lee and So (2014) that it is no longer adequate for librarians to offer a static set of indices and search tools. They need to be able to competently use the latest information technologies and to adopt a critical approach in handling information in libraries and beyond. Chakrvarty (2008) argues that libraries and librarians as information literacy change agents should serve as expert consultants to help other domains develop and put their information literacy policies, programmes and projects in place. Consequently, as coordinator or expert, they need to develop and maintain a consistent and effective information literacy programme by leading amidst changes in administration, resources, and funding. They create educational experiences through designing instructional materials, developing learning outcomes, assessment tools and learning objects across diverse learning environments including face-to-face, hybrid, and online classrooms.

LIS professionals in many countries have accentuated and expanded their roles to be advocates and teachers of information literacy (Anyaoku, Ezeani & Osuigwe, 2015). Training on the use of library resources has been an integral part of library services for ages. This was done through orientation programmes and various user education initiatives involving one-on-one and classroom based instruction. Information literacy education is an extension of these processes but reflects a much broader dimension of user education and more encompassing than the traditional user education (Anyaoku et al., 2015). By empowering students to develop information literacy skills, librarians can contribute to their academic successes and help ensure graduates become independent and successful lifelong learners after graduation. As noted by Dubicki (2013), the primary goal is for librarians to work in concert with the faculty in order to graduate information literate students who can effectively utilise information literacy skills in the workplace, as well as make informed decisions in their personal lives. To achieve this Fister (2013) remarked that the trick is not teaching students how to use the library and other information sources. Rather, they need to focus on how the use of these things today can contribute to critical thinking, analysis, and making meaningful decisions – processes that will continue to be valuable tomorrow. To achieve this aim, librarians need institutional support as well as to collaborate effectively with faculty members to integrate information literacy education into the curriculum (Øvern, 2014). Bury (2011) observed that there is a strong consensus on the centrality of faculty-librarian collaboration in fostering the IL agenda in higher education. Hallam and Smeaton (2019) note that library staff stressed the importance of information, digital and data literacies as critical skillsets in a world where ideas, innovation and integrity can flourish. LIS professionals should therefore be promoters of IL programmes and activities. In support of this statement, Chakrvarty (2008) reiterates that an IL practising library can successfully enable easy access to information as well as train readers to access and exploit relevant information resources in the most effective way by raising the levels of IL within the organisation.

7 ICT Roles in Libraries towards Quality Information Literacy for Knowledge Society

The application of information and communication technology to information storage and access has resulted in enormous increase in the arrays of information available for intellectual consumption (Anyaoku et al., 2015). This has led to the problem of information overload where the flow of information associated with work tasks is greater than can be managed effectively (Wilson, 2001). Williams and Wavell (2007) have also highlighted the significance of information quality, relevance and reliability, as well as the need to deal effectively with the quantity of information and sources available. These developments have increased the need for users to have necessary information retrieval skills that will empower them to identify and retrieve quality information to satisfy their information needs. These skills and values are encompassed in the concept of IL.

ICT is playing a dynamic role in changing the landscape of libraries as patrons' manners are also changing. Since the patrons are the central focus of library services, libraries have to respond to the customer-focused approach. Observational studies by researchers such as Applegate (2009) have demonstrated that students are using academic library spaces in different ways than before (for example, bringing their own laptops), as the library continues to be a key space for learning and scholarly activities within academic institutions and that effective libraries must be responsive to these needs. This replaces traditional models of unidirectional services as library staff and the communities they serve can be co-producers of library services (Berube, 2011). Libraries therefore need to keep up with the changing nature of technological improvements by imparting various forms of literacy, including ICT literacy, and digital citizenship, among others.

ICT or technology literacy is a competency essentially required in the information landscape. According to Anderson (2008), ICT literacy means that one has essential knowledge and skills from three domains: a technical one, a knowledge domain, and an information skill area, making it possible to use ICT appropriately with information in specific content areas. Technology literacy is sometimes referred to as a set of abilities and competencies to access, use and consume technological tools to achieve economic stability (Voogt & Knezek, 2008). It is a continuum of

skills that can always be improved, and acquired through technology experience and instructions. Knowledge society is impossible without information society mediated by new information technologies. Thus, the societal impact of information literacy and digital citizenship is societal transformation which results in a knowledge society.

8 Conclusion

Information literacy offers the promise to enable people to become independent learners and critical thinkers. Hence, well-equipped libraries with ICT tools and information experts have the potential to foster quality information literacy in the knowledge society. As information literacy education is gaining paramount importance in institutions of learning worldwide, librarians in Nigeria need to develop their own programmes and map out strategies that will enable them to fully integrate the programme into the curricula of their universities. Information literacy service by Nigerian libraries should go beyond offering user education and bibliographic instruction. Different information literacy skills required of a knowledge society include basic literacy, library literacy, mass media literacy, ICT literacy, media literacy, technology literacy, visual literacy, tool literacy, resource literacy, socio-cultural literacy, research literacy, publishing literacy, emerging technology literacy, and critical literacy. Hence, libraries have to take the lead in raising the quality level of information literacy within the society through awareness, instruction and coaching as well as campaign at all levels.

9 Recommendations

To demonstrate information literacy in action that guarantees competency-based education and the desired knowledge society. There is urgent need for Nigerian government to designate a lead government ministry, charged with the responsibility for the planning, budgeting and implementing information literacy initiatives and programmes. Part of the responsibility of the lead ministry would also, include periodic monitoring and evaluation of information literacy activities as well as other lifelong learning initiatives. All of these would be done in close consultation with the Ministry of education, Communications and Technology, and other relevant ministries and agencies such as Librarians' Registration Council of Nigeria (LRCN), National Library of Nigeria (NLN), local development agencies and so forth. Also, public libraries need to escalate information literacy services to people without university education experience. All libraries should provide life-long learning for all learners not just in an academic setting.

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