

EXPERT OR NOVICE IN INFORMATION SEARCHING, ACCESS AND SHARING: AN INFORMATION LITERACY MODEL FOR NIGERIAN UNIVERSITY SYSTEM

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ABSTRACT: *Information resources in whatever forms and format exist for people and not the reverse. The rapidly evolving information landscape has demonstrated a need for education methods and practices to adopt and adapt more virile and responsive strategies. Educational methods and practices, within our increasingly infor-centric society, must facilitate and enhance the librarians' and students' ability to harness the power of information which is crucial life skill and a basis for lifelong learning. To survive in this information society, workers and students in Nigerian Universities will need to possess skills beyond those of reading, writing and arithmetic. This study reviewed five (5) information literacy models which include: Kulthau's Information Search Process (ISP) Model, 8Ws Johnson and Lamb Model, NSW DET Information Skills Process Model, The Big6 Model, and Herring's PLUS Model. The study recommends the adoption of Herring's PLUS Model by Nigerian Universities because of their peculiarities and enormous benefits accruable to them by the Model.*

KEYWORDS: Information Skills, Library Skills, Nigerian Universities, Information Literacy, Literacy Models

INTRODUCTION

The idea of information literacy was first appeared in a 1974 report by Paul G. Zurkowski on behalf of the National Commission on Libraries and Information Sciences of the United States of America. The phrase was used to describe the 'techniques and skills' known by the information literate for utilizing the wide range of information tools as well as primary sources in moulding information solutions to their problems (Wikipedia Encyclopaedia, 2010). Information literacy according to the United States National Forum on Information Literacy is the ability to know when there is a need for information, to be able identify, locate, evaluate, and effectively use that information for the issues of problem at hand. The Society of College, National and University Libraries (SCONUL) in the UK has in 2012 described information literacy as 'information literate people will demonstrate an awareness of how they gather, use, manage, synthesize, and create information and data in an ethical manner and will have the information skills to do so effectively.

Information literacy is inconceivably the foundation for learning in our contemporary environment of continuous technological change. As the information and communication technologies develop rapidly, and the information environment becomes increasingly complex with human unquenchable thirst for information and knowledge, educators are recognizing the needs for learners to engage with the processes. Information literacy is synonymous with concepts such as library skills, computer literacy, information skills, information competency, information fluency, information power, digital literacy, ICT literacy, media literacy, and academic research skills. It is also generally seen as a pivotal to the pursuit of lifelong learning and central to achieving both personal empowerment and economic development in any society.

According to Rader (2012), information literacy includes the following competencies;

- The ability to determine the nature and extent of the information needed
- The ability to assess needed information effectively and efficiently
- The ability to evaluate information and its sources critically and to incorporate selected information in to one's knowledge base
- The ability to use information effectively to accomplish a specific purpose
- The ability to understand many of the economical, legal, and social issues surrounding the use of information
- The ability to access and use information ethically and legally.

Furthermore, in the present information age, the people and society that are information literate, possesses the potentials and capacity to compete favourably and turn around their socio-economic status for the better. To reap such and other enviable benefits, people – as individuals and as a nation – must be information literate. To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. Producing such a citizenry will require that schools and colleges appreciate and integrate the concept of information literacy in to their learning programs and that they play a leadership role in equipping individuals and institutions to take advantage of the opportunities inherent within the information society. Ultimately, information literate people are those who have learnt how to learn. They know how to learn because they know how information is organized, how to find information and how to use information in such a way that others can learn from them. They are people for lifelong learning because they can always find information needed for any task or decision at hand. Generally, information literacy is about people ability to operate effectively in an information society. This involves critical thinking, an awareness of personal and professional ethics, information evaluation, conceptualizing information needs, organizing information, interacting with information professionals and making effective use of information in problem solving, decision making and research (Wikipedia Enclopeadia, 2010).

The acknowledgement of information literacy as a catalyst for educational change, human development, institutionalization of democratic ideals, and lifelong learning across the globe by educators and other professionals led to the gigantic efforts by governmental and non-governmental organizations in the promotion of information literacy and its impact. Organizations and associations prominent in this derive includes;

- American Library Association (ALA) under the National Forum on Information Literacy
- The Australian Catholic University's Information Literacy Academic Development Program
- IFLA information literacy section developed information literacy resource directory called INFOLIT Global
- International Alliance for Information Literacy (IAIL) was established in 2003 as a result of Prague Conference on information literacy
- UNESCO sponsors researches and publications on information literacy globally
- INFOLIT was established in South Africa for the promotion of information literacy and its impact

All these and many more underscores the perception and acknowledgement of information literacy as a catalyst required to transform the information society of today in to the learning society of tomorrow.

REVIEW OF INFORMATION LITERACY MODELS

According to Bruce (2004), while many of today's educators are concerned about creating learning activities that require engagement with today's ICT environment, it is attention to information practices that are fundamental to effective information use. It is bringing these information practices in to the curricula, and ensuring that students have the capacities to engage in, and reflect upon such practices, that constitutes information literacy education. Information practices may vary somewhat across disciplines, but they clearly underpin academic and professional practices in, for example, the humanities, science, social science, health sciences and technology based disciplines, as well as underpinning informed civic responsibilities.

For the purpose of this paper, the following five (5) information literacy models were reviewed and assessed for adopting and adapting one in the Nigerian University system in order to effectively explore and utilize the needed information by the stakeholders:

1. Kulthau's Information Search Process Model
2. 8WS Johnson and Lamb Model
3. NSW DET Information Skill Process
4. The Big 6 Model
5. Herring's PLUS Model

Kulthau's Information Search Process Model

The ISP model looks at thinking, feeling and doing. Kulthau showed that the more the learner understands about the information process the more they are in control. The main premise of the Kulthau ISP model includes;

- Initiation i.e opening the inquiry
- Section i.e selecting a general topic
- Exploration i.e exploring for background information and ideas
- Formulation i.e forming a focus
- Collection i.e synthesizing information about the focus
- Presentation i.e organizing information and ideas to share with others
- Assessment i.e reflecting on the learning

Furthermore, according to Kulthau, to have effective library and information services, teacher librarians need to understand the user's perspective. It also states that there is lack theory within library and information sciences to explain fully the user's perspective on information seeking.

WS Johnson and Lamb Model

The 8WS information literacy and inquiry learning model is based on the following;

- Watching i.e exploring
- Wondering i.e questioning
- Webbing i.e searching
- Wiggling i.e evaluation
- Weaving i.e synthesizing
- Wrapping i.e creating
- Waving i.e communicating
- Wishing i.e assessing

NSW DET Information Skills Process

The main steps in this model include;

- Defining i.e articulating the need
 - Locating i.e establishing the source
 - Selecting i.e choosing from the source
 - Organizing i.e achieving coherency
 - Presenting i.e make information ready for consumption and sharing
 - Assessing i.e reflecting on the learning
- This model has similarities with Kulthau,s Information Search Process model

The Big 6 Model

The Big 6 elements are;

- Task definition
- Information seeking
- Location and access
- Use of information
- Synthesis
- Evaluation

The Big 6 model provides support in the activities required to solve information-based problems and the skills have been used in a variety of settings to help those with a variety of needs. For example, the library of Dubai women's College in the United Arab Emirate where English is the second language, uses the Big 6 model for its information literacy workshops. Using the Big 6 at the college ' has transcended cultural and physical boundaries to provide a knowledge-based to help students become information literate(Story-Huffman, 2009). According to Doty (2003) Big 6 model is characterized with a number of weaknesses; this approach is problem-based, as it is designed to fit in to the context Benjamin Bloom's taxonomy of cognitive objectives, and aims toward the development of critical thinking. While the Big 6 approach has a great deal of power, another prominent weakness is that users often lack well-formed statements of information needs, as well as model's reliance on problem solving rhetoric. Often, the need for information and its use are situated in circumstances that are not well-defined, discrete, and monolithic as problem.

Herring's PLUS Model

The skills included in the PLUS model are;

Purpose

- Cognitive skills in identifying existing knowledge
- Thinking skills such as brainstorming or concept
- Skills in formulating questions
- Skills in identifying information resources

Location

- Location skills such as the ability to find information in library cataloguing books, journals, CD-ROMs and online information resources
- Selection skills in assessing the relevance of information resources
- IT skills in using electronic sources such as the Internet

Use

- Reading skills including the ability to skim and scan information resources to find relevance information or ideas
- Interactive skills including the ability to understand what is being read, viewed or listened to and the ability to relate this to existing knowledge

- Selecting skills including the ability to select the appropriate information and reject information in the context of the purpose identified for using a particular information resources
- Evaluation skills including the ability to evaluate information and ideas in relation to aspect such as the currency of the information or ideas, the author and any possible bias in the text
- Recording Skills including the ability to take note in a systematic way which relates to understanding and purpose
- Synthesizing skills including the ability to bring together related ideas, facts and information about a topic and relating this to existing knowledge
- Writing or presentation skills including the ability to write an essay or report or project in a well-structured, logical ordered manner which uses the information and ideas found to good effect.

Self-Evaluation

- Self-evaluation skills including the ability to reflect on the processes involved in assignment, related work and to identify areas of improvement in the effective use of information resources in the future.

INFORMATION LITERACY SKILLS AND NIGERIAN UNIVERSITY SYSTEM

The rapidly evolving information landscape has demonstrated a need for a new education methods and practices to evolve and adapt accordingly. Information literacy is a key focus of educational institutions at all levels and in order to uphold this standard, institutions are promoting a commitment to lifelong learning and an ability to seek out and identify innovations that will be needed to keep pace with or outpace changes. Educational methods and practices within our increasingly information-centric society, must facilitate and enhance a student's to harness the power of information. Key to harnessing the power of information is the ability to evaluate information, to ascertain among other things its relevance, authenticity and modernity. According to Lankshear and Knobel (2003) what is needed in our education system is a new understanding of literacy, information literacy and on literacy teaching. Educators need to learn to account for the context of our culturally and linguistically diverse and increasingly globalized societies. We also need to take account for burgeoning variety of text forms associated with information and multimedia technologies.

The change from an economy based on labour and capital to one based on information requires information literate workers who will know how to interpret information. This has also sparks serious concern among scholars across the globe. Shapiro and Hughes (1996) advocated a more holistic approach to information literacy education, one that encouraged not merely the addition of information technology courses as an adjunct to existing curricula, but rather a radically new conceptualization of 'our entire educational curriculum in terms of information'. Information literacy is essential to the future of democracy, if citizens are to be intelligent shapers of the information society rather than its pawns, and to humanistic culture, if information is to be part of a meaningful existence rather than a routine of production and consumption.

The significance of information literacy education lies in its potential to encourage deep, rather than surface learning, and in its potential to transform dependent learners in to independent, self-directed, lifelong learners. Without information literacy, people are condemned to lack of information, dependence upon others for access to knowledge and information, and even to acute levels of information anxiety (Wurman, 2001). Information literacy instruction in higher education can take a variety of forms: Stand-alone courses or classes, Online tutorials, Workshops, Course related instruction, or Course integrated instruction.

In Nigeria University system, the most popular practice is the Stand-alone courses or classes normally conducted by an independent unit of the Universities known as General Studies Unit (GSU). This unit administer courses on information literacy independent of other departmental courses. These GSU courses are credit-bearing and core as they form part of the requirement for students' graduation from the University. The courses include;

- 1- Use of Library
- 2- Learning and communication skills

Furthermore, various departments within the Universities are also initiating and integrating courses such as research methods to encourage and increase students' information competencies.

According to Bruce (2004) in any educational sector, there are four critical components of an information literacy program;

- 1- Resources to facilitate the learning of specific skills e.g. Web based information skills enhancement packages and other point of need, or self paced instruction
- 2- Curriculum that provides the opportunity to learn specific skills, either early in a course or at point of need (from self-paced packages, peers, lecturers, librarians) (integrated)
- 3- Curriculum that requires engagement in learning activities that require ongoing interaction with the information environment (embedded)
- 4- Curriculum that provides opportunities for reflection and documentation of learning about effective information practices (embedded)

The first of these represents the resource based that supports learning skills underpinning information literacy, the second represents curriculum integration, and the latter two represent what is better described as 'embedded' information literacy education. In all sectors, curriculum development, including course approval and review processes, may be used to monitor the inclusion of information literacy in curriculum.

Operating alongside this model of information literacy education, are three critical elements of learning to be information literate;

- 1- Experiencing information literacy (learning)
- 2- Reflection on experience (being aware of learning) and
- 3- Application of experience to novel contexts (transfer of learning) (Bruce, 2004)

Finally, Karelse's (2000) conclusion from several years' involvement with INFOLIT as reported by Bruce (2004) capture some of the challenges for promoting the information literacy agenda:

In order for the new information infrastructure to aid development by the people, for the people and of the people, it seems imperative that people's capacities are developed to ensure that they can participate in shaping the development of the global information society. The ways in which curricula are developed in response to this need and the ways in which educational systems are designed to address the problems of access, equity and redress are central to this challenge. Most importantly, the extent to which academics who wield tremendous power within the system are able to shift their mindset from a notion of 'having to teach their students everything' will determine how productively the opportunities presented by the formulation of a lifelong learning framework are created. The extent to which academics are prepared to become more reflective and self-conscious of their own ongoing learning will influence their ability to engage with students more interactively to create open spaces in to which students can bring their own experiences to create quality learning.

CONCLUSION AND RECOMMENDATIONS

Information literacy is a natural extension of the concept of literacy in our information society, and information literacy education is the catalyst required to transform information society of today into the learning society of tomorrow. This underscores the need and necessity for the Nigerian Universities to restructure their curricula so as to incorporate competencies that an informed citizen of an information society ought to possess to participate intelligently and actively in the society. It is however, obvious that, information literacy education promotion is not possible without partnership especially at University level. Synergy between students, information specialists, curriculum designers, community organizations, teachers, amongst others is important and for them to have awareness of the value of information literacy as a tool for individual, institutional and national development.

RECOMMENDATIONS

Having reviewed the five (5) information literacy models viz Kulthau's Information Search Process model, 8WS Johnson and Lamb model, NSW DET Information Skills Process model, The Big 6 model, and Herring's PLUS model, and careful assessment of the peculiarities of Nigerian University system, Herring's PLUS model is hereby recommended for adoption and adaptation in the Nigerian University System because of the following reasons;

- 1- The model is more detail and encompassing
- 2- The model included electronic information resources skills
- 3- The model included report or project writing skills
- 4- The model emphasized on collaboration among the critical stakeholders i.e. students, teachers, staff and librarians in the process of knowledge seeking and delivery
- 5- The model acknowledges the need for knowledge sharing and skills transfer among the stakeholders
- 6- Various empirical studies revealed that application of Herring's PLUS model has been beneficial and fulfilling to students as it simplifies the process of learning and helped them to be aware, to think, to question and, if possible, be critical.

OTHER RECOMMENDATIONS TO THE SYSTEM

For sustainable development of education and improved information literacy skills, the following recommendations are offered to the Nigerian University system and the country's education sector in general

- Information literacy skills must be taught in the context of the overall process
- Information related skills that are complex or difficult to comprehend should be broken down into smaller and simpler parts
- Instruction in information literacy skills should be integrated into curriculum and reinforced both within and outside of the educational setting
- Academic librarians should mount some programs to encourage faculty to facilitate their students' mastery of information literacy skills so that the faculty can in turn provide information literacy learning experience for the students enrolled in their classes
- More importantly, there should be synergy among the critical stakeholders in the sector i.e. students, faculty, librarians and other staff for sustainable development and progress of information literacy education in the country.

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