

INFORMATION LITERACY: AN INTEGRAL NECESSITY IN GENERAL STUDIES PROGRAMME IN NIGERIAN UNIVERSITIES

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ABSTRACT

Developing Information literacy skills to support lifelong learning has become a major area of emphasis globally. Lifelong learning is an independent skill that enables an individual to learn how to learn to be successful and productive in all facets of life. The individual desires to continue to learn beyond the structured classroom setting of school and university. It is a driving capacity to apply self-directed learning to be able to self-manage. Therefore, developing information literacy that supports lifelong learning becomes an imperative mission of the university or any tertiary institution. The importance of information literacy increases with the rapid growth and changes in technological developments in relation to formats, sources, authenticity, retrieval of information and contemporary learning environments which extend beyond the traditional or formal classroom setting. These challenges have brought the need for information literacy to the fore front, especially as it cuts across all fields of study, all learning environments and all levels of education. The purpose of this paper is to review some theoretical frameworks on information literacy as a necessary skill for inclusion in all disciplines and specifically in the General Studies Programme with background information from Ajayi Crowther University, (ACU) Oyo.

KEYWORDS: information literacy information literacy skills information literacy models general studies programme Nigerian universities Ajayi Crowther University, Oyo.

INTRODUCTION

In a formal education context, having the ability to read and write or having a good knowledge in a particular discipline are valuable elements of a literate person. These characteristics cannot override or be substituted for information literacy (IL). General and specific studies about IL, in addition to influence of technology on the new learning environment have changed and modified the concept of IL. New ideas and benefits of information literacy also influence information seeking behaviour and needs of those in desiring adequate information for any purposeful transaction.

Many studies have been carried out on information literacy. One of the earliest is that of Paul Zarkowski in 1974 as indicated by Foggett, (2003). It has also become common knowledge that as a skill, IL has three prevalent characteristics encompassed in its commonality to all learning environments, all levels of education and to all disciplines. By implication, every learner at any level of formal education from primary to tertiary level of education should know and apply basic information skills, utilizing information and communication technology, to analyse tasks, information needs, search for and access a variety of information resources. From all reports, if information skill is properly applied, the learner from the low level is likely to be able to

progressively gain enough knowledge from the content of what is being taught and scale through life with much ease. This would be better achieved by applying self-directed learning which further enables the learner to have greater control over sufficient learning and strategic planning. Consequently, information literacy skills provide the foundation to future educational and occupational career readiness and self-management. Its inclusion in school curriculum standards will surely enhance future educational and workforce developments and reform policies in national developments.

In Nigeria, several studies on IL practices exist. Suffice it to state that the General Studies Programme (GSP) began at the University of Nigeria, Nsukka (UNN) in 1960 and later after 1962 imbibed by the University College, Ibadan, (UCI) (Noah, 2003) before a formal introduction and adoption by the National Universities Commission (NUC). Part of the objectives of the programme is exposure of students to inter-disciplinary courses in humanities, liberal, science, socio-economic, historical, entrepreneurial education, etc. to complement more specialized learning undertaken in a student's chosen field of study. However, the general goals and stipulated course synopsis are the same and tailored to preparing students to function successfully in the society and contribute to national development. It involves also creating awareness of students' immediate environment, institutions, library and information literacy that would encourage lifelong learning and progress.

Presently, the programme incorporates more than ten courses. Close observation reveals that some of these courses are compulsory for all students regardless of area of specialisation, some are electives or compulsory for specific programmes. In some universities, the content of a specific course has been modified to cater for internal situations and locality. There are also differentiations in nomenclature. The crucial factor is that to be eligible for an award of a degree in any Nigerian university, a student must take and pass specified general studies courses.

It is of great interest and relevance to add that there have been instances where an individual upon graduation, ignores the chosen field of study and pursues a career based on the knowledge obtained from the GSP. On the basis of the three prevalent characteristics of IL and the benefits to an individual, especially in the attainment of lifelong learning, it is recommended that IL be an integral part of any individual programme across the curricula from primary to higher levels including GSP in higher education in Nigeria.

The numerous courses in universities in Nigeria are usually undertaken on the basis that they are important for individual, societal and economic growth. One militating factor to this growth is relatively low level or poor information literacy skill (Anunobi, 2016), resulting to learners' inability to identify, find, evaluate, manipulate and apply information successfully for positive results and to become lifelong learners. Thus, this paper is based on the premise that IL provides suitably, the skills required of a 21st century higher education student and that this skill/competence is applicable to every emerging situation, discipline and level of education, therefore not static. The presentation is in three parts. Part one presents a theoretical discussion on: concepts, components of information

literacy, some models that have been developed and applied in teaching and learning, benefits of IL and how to integrate IL into the curriculum. Part two provides background information on GSP in Nigerian Universities. Attempt is made to justify the necessity of IL as an integral part of the GSP programme by explaining the relationship between information literacy process and skills and the curriculum and the steps that could be adopted. The third part is the conclusion and recommendation.

Definition of Information Literacy

The concept of information literacy has been defined in various contexts by many scholars. Many of the definitions highlight the same basic concepts, guidelines or principles and provided in (American Library Association (ACRL), 2000) ALA, 2006 and UNESCO, (2008). In part, ACRL, 2000 in its definition includes the concepts of having sets of abilities to be able to recognise when information is needed, and having ability to locate, evaluate, and use effectively the needed information. The same source makes a distinction between information literacy and information technology skills stating that IL exhibits broader area of competence; and also shows significant overlap with information technology.

UNESCO, 2008 highlights same principles involving ability and the capacity of people to recognise, locate and evaluate the quality of information in addition to storage and retrieval of information; making effective and ethical use of information and applying information to create and communicate knowledge. From an educational perspective the same basic concepts resonate. Bruce (2003) re-echoes ACRL, (2000) and UNESCO, (2008) including 'the ability to access, evaluate, organise and use information to learn, problem-solve, make decisions in formal and informal learning contexts, at work, at home and in educational settings'. In describing IL, Barbour, Gavin and Canfield (2004) explains that proficiency in information literacy entails gaining knowledge of the mechanics of computer and application of advanced cognitive skills in retrieving, evaluating and communicating information. Some definitions have incorporated information technology literacy, computer literacy, media literacy, library research skills, and cognitive skills into the components of information literacy (UNESCO, 2008; Agbo and Igwebuikwe (2014). These definitions express the same ideas and qualifications that anchor the summation that the information literate person who has learned how to learn extends the use of information literacy skills beyond solving school and academic problems to the workplace. Of necessity such a person must also be proficient in applying good analytical, critical, evaluative, thinking and problem solving skills using a variety of information and communication technology tools.

Components of information literacy

In trying to isolate the components of IL in the library and information activities, it is worthwhile to state that IL is not the same as library orientation, user education, library instruction, bibliographic instruction and information technology literacy. It does not only have a broader area of competence, it embraces many skills or competencies, which are related or overlap with information technology skills, information competency and computer competency (ACRL, 2000; Barbour, Gavin and Canfield, 2004). It is also necessary to state that becoming information literate is a process,

progressing through many stages thereby making it possible for an individual to choose to follow different paths to becoming information literate and may also learn different skills at different points (Society of College, National and University Libraries SCONUL, 2011). Bruce (2003) supports this multi-disciplinary skills acquisition process and asserts that this has implications for how different people experience the information literacy agenda and how they approach information literacy in curriculum. Foggett (2003) provides six interacting and cyclical steps in the information process that can help students achieve their information need purposes.

From the definitions of information literacy proffered by ACRL, 2000; UNESCO (2008), Irving, (2011), Society of College, National and University Libraries (SCONUL), 2011 and cited by numerous scholars, the components of information literacy include:

- ability to understanding how information is created or produced;
- ability to recognise when information is needed;
- identifying or recognising the right type of information based on individual need;
- knowledge of library research skills (searching, finding, access, retrieval, differentiating between primary and secondary sources, etc.);
- critical literacy to be able to analyse and evaluate the sources of information for quality and quantity of useful information;
- application skills that enhance synthesis of new and previous information to planning and creation and also communication of new knowledge and product.
- problem solving/thinking skills to be able to know the different formats and locations of information sources
- IT literacy skill (using information technologies including computers, e-mail, internet, software programmes, and databases to achieve personal, academic and job related tasks)
- Information ethics (ethical, legal and socio-economic issues and use of information and information technologies, etc.)
- Social responsibility skills

A critical analysis of each component will likely expose the various areas skills overlap or are interwoven. However, all the components constitute the basic principles supporting the process of becoming information literate, the development and incorporation of IL into school information curriculum

User education versus Information literacy in libraries

More traditional ways of inculcating library information literacy under the umbrella of user education include library orientation, library instruction, bibliographic instruction and to a very low extent, information literacy. These activities provide students the basic knowledge to locate access and use resources in the library. There are, however, significant differential characteristics in some of their evolution, setting and methods and content of instructional delivery and long-term effect.

Though there are also few basic similarities in the major uses of each service. ALA (2009) records the following distinctions:

User Education: This terminology is more widely used than bibliographic information to incorporate several activities involved in teaching users the best possible ways of using library resources, services, and facilities. The library adopts a variety of teaching methods such as formal and informal instruction delivered by a librarian or other staff member (one-on-one or in a group), film shows, online tutorials, audiovisual materials, and printed guides and pathfinders. (http://lu.com/odlis/odlis_u.cfm#usereducation)

Library instruction has also been used to refer to user education or bibliographic instruction. Though its goal is the same as described in user education, library instruction focuses more on in-depth explanation of effective and valuable use of library resources, and facilities including: techniques in using reference sources, card catalogues, literature searches, web based services CD-ROM searches and so on. Library instruction can be taught as credit earning course.

Library orientation comprises activities designed to welcome and introduce new users to the services, resources, collections, organisation of materials and the physical facilities of the building. Teaching students or other library users' library orientation may take different forms. Library orientation is controlled by librarian.

From the few distinctions, it becomes apparent that library orientation, library instruction, and bibliographic instruction are hinged on library use, and are not to a very far extent designed to develop cognitive skills for more advanced information search and use. As opined by Bucher (2000) mere exposure to information does not mean that the student is well-informed since they are unable to apply the fundamental information skills that support independent internalised development.

It has already been mentioned that IL is distinct and exhibits broader area of competence, requiring more skills than library education, library orientation and bibliographic instruction even though these also involve information technology skills in retrieving, evaluating, and communicating information. Essential elements of IL include cognitive skills which engage students in higher-level thinking, problem-solving and decision-making. In other words, if cognition is properly applied to information need, students or information seekers would not only be able to synthesize, locate and retrieve information; determine relevant information; develop strong search strategies but also critically evaluate, plan, manage and communicate research findings without violating ethical, legal and social dimensions of information (ACRL, 2000; UNESCO (2008), Irving, (2011), Society of College, National and University Libraries SCONUL, 2011). Cognitive development engages students in more sophisticated research and problem solving (Bucher, 2000). Adoption of this IL processes from low to the highest levels of education develops an independent lifelong learner. UNESCO (2008) describes IL and lifelong learning as beacons of the information society that brighten development, prosperity and development.

In the employment sector, IL has been classed as a very essential useful skill and also described as one of the transferable skills that enables individuals take their expertise to diverse job areas to seek employment beyond their chosen field of study. This is evident in the analysis of job vacancies conducted by Younger, 2005. Such employees have a mastery of the content of what it takes to become more self-directed learners. This supports the notion that the value of IL extends beyond school and application to academic work such as writing academic papers, dissertations or project work to workplace.

Several countries have recognized the great values of being information literate. They have developed and provided a host of options and opportunities in form of models or framework for inculcating IL in learners. The components distilled and enumerated earlier ((ACRL, 2000; UNESCO (2008), Irving, (2011), Society of College, National and University Libraries SCONUL, 2011) are meant to be integrated into the curriculum, daily lesson plan and classroom management, and used in information teaching and learning in schools and institutions of higher learning.

The various models reckon also with the cognitive concepts and strategies of instructional learning and approaches to information skills. An example of such model is the Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education (ACRL, 2000) which provides framework for assessing the information literate individual. Secondly, it caters for the interest of school librarians in higher education to articulate IL competencies 'with those of K-12 so that a continuum of expectations develops for students at all levels (Irving, 2008).

Another example is the Seven Pillars of Information Literacy model developed by The Society of College, National and University Libraries (SCONUL) in 1999, and revised in 2011. The later edition stipulates that becoming information literate "is not a linear process" with a rider that individuals can follow different routes that are most convenient to become information literate. They may decide also to learn different skills at different points/locations and levels of education/study. Further application of this report may include adoption of different strategies, and not necessarily in formal school settings. The model specifies a series of seven attitudes and understandings already highlighted in the components of IL.

<https://www.sconul.ac.uk/sites/default/files/documents/coremodel.pdf>

A New Curriculum for Information Literacy (ANCIL) developed a new approach to information literacy teaching and learning that is considered suitable for the skills required of a 21st century higher education student. The framework address in a modular, holistic, and flexible way of developing information needs of students entering higher education supported with examples and case studies of how IL can be applied to wide range of academic as well as social environments and locations. The curriculum contains ten 'strands' to be considered while mapping out information literacy learning. Some strands are: developing academic literacy, mapping and evaluating the information landscape, managing, presenting and communicating knowledge and creating new knowledge (source: www.facetpublishing.co.uk/titlephd?id=048224#about tab

The National Information Literacy Framework developed in Scotland, groups information literacy learning into school level and higher education level. These levels of information literacy learning have been mapped against the Scottish Credit Qualification Framework (SCQF). Part of the research findings report that information literacy skills were generally taught in first and second years at the school level though the skills were not subsequently reinforced within the curriculum. A remarkable effect being fragmented levels of knowledge and usage for the remaining years. The report indicates also possession of poor or limited information literacy skills framework in students arriving at university. www.caledonian.ac.uk/ils/framework.html

Other frameworks that explain the principles, standards and practice which supported the embedding of information literacy in the design and teaching of educational programs across the curriculum are the National Information Literacy Framework (Wales) and The Australian and New Zealand Institute for Information Literacy (ANZIIL), Association for Educational Communication and Technology (AECT).

While reporting on Kenyan Government information literacy and ICT initiatives Tilvawala, Myers and Andrade (2009) indicate that out of the five different components of IL (including recognising information need, locating, storing, applying and using information), recognising information needs was perceivable at a high degree in all the initiatives. This situation necessitates much more work to be done because the ability to recognise information needs confers on the individual to the capacity to be aware that information is required to solve or address a certain task. Catts and Lau (2008) explain that this capability is applicable to every emerging situation, therefore not static. This is actually the starting point to becoming information literate.

It becomes evident that IL, as a process and skill, incorporates a lot more than any of the other library information skills often enumerated under user education. It has been extensively reviewed and regenerated, incorporating more distinct broad skills. IL has also been greatly revolutionised following the influence of information overflow, technological applications, increased and diversified learning groups and learning environments to cater for not only students in traditional campuses but also those involved in distance education.

Information is now global and has become a common commodity. There has been an overwhelming amount of information available and information consumers are empowered to search for information on their own using the numerous products and access points. Furthermore, with new technological developments and innovations come new challenges and new expectations. Learners and users of information expect to participate in information creation, evaluation discovery and selection. Search engines provide users with free information in a variety of formats, including electronic documents. Many library users have the impression that all their information needs can be handled and satisfied by search engines, and that all information is available free on the web. (Wawrzaszek and Wedaman, 2008). They do not bother about quality and validity of the information. Thus, as stated by ACRL, (2000) and Bucher, (2000) sheer abundance of information

without abilities to use valid information effectively will not produced an informed literate citizenry. Neither will information technology literacy without the ability to synthesise, convert old facts and data into creation of new knowledge produce the same.

Benefits of being information literate

There are multiple in-built benefits of IL when considered as either a skill or learning outcome that can be distilled from (ACRL, 2000: Barbour, Gavin and Canfield (2004) and ANCIL framework. Some of these make it imperative for an information literate individual and more importantly, students in tertiary institutions to able to:

- Reason about course content at a deeper level than through use of textbooks and lectures;
- Formulate and state research problems, design, questions, frame hypotheses, methodologies and so on;
- Understand research techniques, points of view of other existing works and practices employed in the presentation of information distilled from all sources;
- Assess and determine the extent of information needed and have control over the increasing myriads of information being created and generated daily;
- Access the needed information effectively and efficiently applying appropriate search tools and techniques;
- Create and evaluate information and its resources critically using various media and particularly those requiring computer and telecommunication application;
- Convert facts and data into new knowledge that can be disseminated in a meaningful language and way that others can easily interpret and use to accomplish specific tasks;
- Merge selected information into one's knowledge base in such a way that the learning becomes beneficial beyond school years into employment, societal and family life;
- Understand the economic, social, legal and ethical issues surrounding the use of information and
- Apply critical, analytical and unbiased interpretation in well-informed judgments about local, national and international issues as well as policies and policy-makers;

Other benefits of IL which may be expressed as learning outcome include:

- Multiplies the opportunities for students' self-directed learning and allows the person to assume greater control over by learning using a wide variety of information sources that assist to sharpen critical thinking;
- It supports independent learning and forms the basis for independent lifelong learning
- Students are able to master the content of what is learned and extend their ideas through investigations
- Promoting information literacy in distance education courses develops a comparable range of learning experiences as are offered in traditional campuses

- It promotes spirit of perseverance in investigation to find out what is necessary to get the job going

General Studies Programme in Nigerian Universities

General Studies courses were started in the first generation universities and precisely in the University of Nigeria, Nsukka (UNN) and University of Ibadan in 1986. As mentioned earlier, it is through the approval of a minimal standard for academic activities that, the National University Commission (NUC) launched the General Studies Programme (GSP) into the University's curricula and the programme has been running till date in all institutions (federal, state and private) of higher learning in the country. All the prescribed courses are common to specified levels of study and to all degree programmes. The courses are spread over 100 and 200 levels of study in some universities, and up to 300 level in others. By implication, to be eligible for award of Bachelor's degree a student must take and pass the prescribed General Studies courses and obtain a minimum of the stipulated credit units.

The philosophy of the GSP in all universities in Nigeria, including ACU, is based on the philosophy that students should be equipped with certain intellectual knowledge on diverse spheres of equally valuable subjects, concepts and fields of study beyond their individual areas of specialization including entrepreneurial skills if they are to understand the complex dynamics of the modern society and for a better living.

The General Studies Programme is multidisciplinary, requiring study in a variety of areas. Some courses are: Effective Communication in English, Use of library and ICT, Introduction to Logic and Philosophy, Citizenship Education, Entrepreneurial Education, and Health Education, among others. Each course has its specific objectives and in all universities there is uniformity because there are basic minimum contents for each course specified by NUC. For example, the objective of Effective Communication in English course is helping students develop adequate competence in the use of English language as a tool for their studies and an effective means of communication in society and in their future employment/enterprise. It will also enable them to acquire a body of situational relevant knowledge outside their respective fields of specialization for successful living. Therefore, the general objectives for each course will fall into any of the following objectives summarized in ACU, Oyo (<https://www.acu.edu.ng/index.php/administration/offices-units/general-studies-unit>).

- acquire knowledge through critical information gathering, applying database resources, understanding library catalogues, user education, and computer-assisted searching (Use of library and ICT);
- communicate effectively in both written and oral English language, and have some working knowledge of the French language (Effective Communication in English and French respectively);

- make critical judgments in a logical and rational manner (Introduction to Logic and Philosophy);
- develop the skills to maintain health and understand the factors that impinge upon it (Introduction to Health Education);
- gain understanding of ethnic interdependence and cultural diversity and develop consideration for values, lifestyles, and traditions of the various ethnic groups in Nigeria and West Africa (West African People, Culture and Language);
- acquire proper value orientation which will enable students cultivate desirable habits, attitudes, patriotism, nationalism and foster the spirit of service to humanity (Anglicanism and Citizenship Ethics);
- acquire effective working skills to make them employable and also develop entrepreneurial skills that will enable them become employers of labour (Entrepreneurial Education).

There are other courses including Introduction to the Social, Management Sciences and Humanities and Peace and Conflict resolution. It is in Use of Library and ICT that IL is mentioned as an integral part of user education for new students not as a course in the GES curriculum. Generally, the courses fall into three categories namely: compulsory, required and elective. In Ajayi Crowther University, though there is a specified General Studies Unit that coordinates the activities, the courses are domiciled in different Faculties and the lecturers drawn from these faculties. Courses with interdisciplinary content attract lecturers from other relevant department so that the course contents are adequately addressed.

Why integrate information literacy into the GSP programme?

Attempting to answer this question will exhume all that has been said about IL starting from the definition to the benefits. Suffice it to reiterate its commonality of all levels of study, discipline, learning environment/location and all levels of education. Secondly, the skills are more in-depth than library use and orientation programmes. This statement alone answers the question that has been asked. Integrating IL into school curriculum involves a process that displays step-by-step series of instructions on how to understand, search, manage, determine useful information and use effectively the huge amount of information that is available. The process of integration may also be systematical throughout the students' career (Open University, 2010). Therefore, the building process is not abrupt but continues gradually.

Ajiboye and Tiamiyu, (2018) report that many newly admitted undergraduate students lack adequate information skills that would enable successful completion of their courses. The study reports also the introduction of IL as a course into a faculty curriculum. This course is specified for five departments including Computer Science, Library and Information Science, Mass Communication, Information and Computer Science and Telecommunication Science. Unfortunately, there is an unpleasant report involving lack of systematical assessment and usefulness of the course to determine improvement of IL capabilities of the students. However, the study recommends integration into faculty curriculum for many fields of study.

Abubakar and Isyku, (2012); Agbo and Igwebuike (2014) have examined aspects of teaching and inculcating information literacy skills in Nigerian universities to support its integration. The university setting and who (learners) to teach discussed in the two papers lend support for inclusion of IL at university learning environment and also level of education. Consortium of National and University Libraries (CONUL) (2004); Roberts and Bhatt, (2007) have supported development of collaborative working partnership that enhance integration of IL into a series of programmes of science and engineering students

Adoption and application of ANCIL's broad definition of IL that encompasses academic as well as employment and social environments, has placed the skill as a fundamental attribute of discerning academic scholars in Nigeria and informed citizens. By the same quality, it also introduces a modular, holistic, and flexible way of developing information needs of students at all levels, other learning environments not only those entering higher education. Possession of poor or limited information literacy skills by students arriving at university as report by the National Information Literacy Framework (Scotland) is also a peculiar characteristic of undergraduate students in Nigeria (Ajiboye and Tiamiyu, 2018) thereby supporting the need for inclusion of IL into GSP curriculum. The inclusion will enable acquisition of effective working skills to make students employable and also develop entrepreneurial skills that will enable them become employers of labour. The specific course that is designed to inculcate this ability is Entrepreneurial Education. Therefore, attempt to answer the question of why IL should be integrated into the GSP and without repeating the benefits, one can suggest the following:

- Information literacy represents a shift in thinking and application and it must be sustained progressively at all levels of education.
- By linking information literacy to learning outcomes in programmes, one is equipping learners with the ability to articulate the skills they have developed and apply them to develop other skills they need in the school, community and workplace.
- Learners and particularly students in tertiary institutions are well grounded in advanced scholarly writing skills that are often taught in Research methodology including: formulating and stating research problems, questions, and issues, understanding the techniques, literature review, data analysis, and dissemination of new facts and data.
- It offers cross-curriculum skills (from chosen discipline to liberal studies) that cannot be alienated from ways of learning and teaching in an era of lifelong learning.
- IL is a career enhancing skill and in some professions a core requirement
- IL (like writing) is a process that promotes a modular, holistic, and flexible way of developing information needs of students entering higher education.
- IL offers varieties of forms and ways an individual can adopt to develop high cognition and transferable skills that enhance self-management and efficient job output.

- IL enables learners acquire the ability to discriminate and determine what information can be trusted especially when engaged in research at the undergraduate and graduate levels. (students may in given assignments on any of the GSP that will require application of IL skills)
- IL programmes increase the capability of students to control the huge amount of information that is available in diverse formats and sources.
- IL supports the use of technology not only in the classroom but the entire learning environment including distance or net-worked education. It supports flexible learning mode and learners can select a variety of modes and go at convenient pace.

How to integrate IL into the curriculum

Reports from literature indicate that integration of IL involves the collaborative participation of library/librarians/information professionals, faculty/department and information technology specialists to create a suitable learning environment with adequate information infrastructure that makes it possible for students to apply information literacy skills to technology literacy skills and tools. Reports of initiatives from the SCOUNL, (1999), Barbour, Gavin and Canfield (2004) Open University, (2010), Irvin, (2011) Ajiboye and Tihamiyu, (2018) on some universities that have integrated IL into their curricula indicate that:

- Information literacy programmes should be presented in stages at different levels.
- The instruction should begin from the first year and continue until graduation and the skills be incorporated across courses of study (it should be used within a variety of curricula contexts such as the GES programme).
- The process should take cognizance of and determine the learning outcome, appropriate information literacy skills;
- The levels the courses are to be taught should be determined and planned in detail so that the skills become adaptable with the wide range of disciplines of the institution.
- There should be collaboration between Library/librarians/information professionals and faculty
- While Library/librarians/information professionals carry out their professional roles to identify appropriate information literacy objectives, recommend and suggest appropriate information sources, embark on user education to enable students carry out specific assignments and also work individually with students on their projects, the Faculty integrates information literacy objectives into courses. it is opined that individual lecturers are to develop appropriate assignments that provide students with opportunities to practice and strengthen their information literacy skills.

In developing curriculum Bruce (2004) suggests that such should provide learners the opportunity to learn specific skills, either early in a course or at point of need from self-paced packages, peers, lecturers, librarians. Secondly, the design or what may be regarded as course content incorporates learning activities that require ongoing interaction with the information environment. Lastly, the

curriculum should provide opportunities for reflection and documentation of learning about effective information practices. The summation of Bruce (2004) is that integration should be through the process of constructive alignment and learning activities should require students to engage in a process that leads to achieving desired learning objectives. Furthermore, information literacy should be seen as forms of information practice that can be encouraged or discouraged by particular learning activities. Encouragement activities need availability of adequate resources to facilitate the learning of specific skills such as web based information skills, enhancement packages and or self-paced instruction.

It is evident from the review of literature that for as long as the philosophy of GSP in Nigeria stands and the courses are compulsory for all students to be able to graduate, IL skill are of immense value. Equipping students with relevant intellectual knowledge on diverse spheres of equally valuable subjects, concepts and fields of study beyond their individual areas of specialization process, are major components that cannot be isolated from the curricula.

CONCLUSION AND RECOMMENDATION

This paper has reviewed some existing reports and theoretical frameworks on information literacy to justify its necessity and relevance to all disciplines at the tertiary level of education and specifically as very relevant skill for inclusion in all General Studies Programme in Nigeria with background information from Ajayi Crowther University, (ACU) Oyo. The premise is IL is an essential skill that is common to all levels of study, discipline, learning environment, all levels of education; very suitable for distance education and flexible mode of learning. It has also been established that becoming information literate requires students be taught and engaged in a process that leads to achieving desired learning objectives.

Integrating into school curriculum is a process leading to building skills that encourage and develop independent lifelong learning, more importantly when carried out in stages commensurate with level of education and learning environment. By applying series of systematical instructions, a student acquires several information skills on how to acquire, understand, search, and manage information, apply the knowledge gained in making critical judgments in addition to disseminating it in a variety of ways.

Review of literature has revealed that some elements of IL including: formulating and stating research problems, analyzing information, presenting questions, and hypotheses, understanding research techniques, points of view and practices employed in the presentation of information from all sources, literature review, and efficiently synthesizing, converting facts and data into new knowledge that can be communicated meaningful are embedded in Research Methodology for all courses. This course prepares students mainly for their final year project work. It is important to stress that IL embraces a wider range of skills than Research Methodology. The benefits have been expressed including learning outcome. Suffice it to say that students are equipped with the ability to

articulate the skills they have developed and apply them to develop other skills and disciplines they need in the school, community and workplace. IL offers varieties of forms and ways an individual can adopt to develop high cognition and transferable skills that enhance self-management and efficient job output.

Analysis of reports strongly support that by integrating and teaching IL in modules in the General Studies Programme in tertiary education in Nigeria, learners would be better equipped with advanced scholarly writing skills. The process of integration requires collaborative effort of librarians, faculty and ICT staff. Librarians are expected to help to identify appropriate information literacy objectives, recommend sources that fit course goals, provide instruction targeted to the specific assignment, and work individually with students on their projects. They are also need to think more broadly and update their knowledge on emerging trends, developments, ethical issues of information, and become more familiar with the curriculum. While Library and information professionals develop closer relationship with faculties and technical staff within the institution or other campus units, Faculty incorporates IL objectives into courses, develop assignments that provide students with opportunities to practice and strengthen their information literacy skills, and plan accompanying instrument.

The paper provides avenues for further research. There is very little research on integration of IL in the curriculum of low to highest levels of education in Nigeria. The findings of this paper could be re-examined by analyzing the components of IL, integration into curriculum at school to tertiary levels of education bearing indicating what should be taught and how it should be used within a variety of curricula contexts such as the GSP.

In conclusion, the paper recommends that on the basis of the enormous benefits for being information literate and in view of the fact that as a linear process, it is common to all discipline and fields of study, IL should be integrated into the GSP curriculum, daily lesson plan and classroom management and used in information teaching and learning in schools and higher institutions. Of general importance is that the ability of learners in our universities to contribute their full potential to the nation's future economic growth is critically dependent on having enough people with the right skills in the right place at the right time to develop and apply the new technologies. Faculty staff will get opportunities to acquire IL skills to be able to identify new information sources and techniques, access, manage, and evaluate management skills which support better research and teaching.

REFERENCES

- Abubakar, U. A. and Isyaku, A. A. (2012) Teaching information literacy skills in Nigerian universities: whose responsibility? *Journal of Research in Education and Society*, Vol. 3: No.2
- Agbo, A. D. & Igwebuikwe, E. U. (2014) Inculcating information literacy skills in Nigerian university students: the foundation for independent lifelong learning. *Journal of Education and Practice*, Vol. 5: No. 39. 19-25.

Ajayi Crowther University, (ACU) Oyo <https://www.acu.edu.ng/index.php/administration/offices-units/general-studies-unit>

Ajiboye, O. O. & Tiamiyu, M. A. (2018) Effectiveness assessment of an information literacy course at the University of Ilorin, Nigeria. *Journal of Information Science Systems and Technology*, Vol. 2: No. 1, 19-33

American Library Association (ALA) (2000). Information literacy competency standards for higher education. Available from <http://www.acrl.org/ala/mgrps/divs/acrl/standards/standards.pdf>.

American Library Association (ALA) (2009). Bibliographic instruction. Available at http://wikis.ala.org/professionaltips/index.php?title=Bibliographic_Instruction

Anunobi, C. V. & Ukwoma, S. (2016). Information literacy in Nigerian universities trends, challenges and opportunities. *New Library World*, Vol. 117: Issue 5/6, pp343-359

Association of College & Research Libraries (ACRL) (2000). Information literacy competency standards for higher education. Available from <http://www.acrl.org/ala/mgrps/divs/acrl/standards/standards.pdf>.

Barbour, W., Gavin, C. & Canfield, J. (2004). Integrating information literacy into the curriculum. Educause Centre for Applied Research. *Research Bulletin* Vol. 2004, Issue 18 pp.1-10. Available at <https://net.educause.edu/iCr/library/pdf/ERB0418.pdf>

Bruce, C. (2003). Seven faces of information literacy: Towards inviting students into new experiences. <http://crm.hct.ac.ae/events/archive/2003/speakers/bruce.pdf>

Bruce, C. (2004). Information literacy as a catalyst for educational change. A background paper . In Danaher, Patrick Alan, Eds. *Proceedings "Lifelong Learning: Whose responsibility and what is your contribution?"*, the 3rd International Lifelong Learning Conference, Yeppoon, Queensland. pp. 8-19, Available at <http://www.nclis.gov/libinter/>

Bucher, K. T. (2000). The importance of information literacy in the middle school curriculum. *The Clearing House*, Vol. 73: No. 4 pp. 217-220

Catts, R. & Lau, J. (2008). *Towards information literacy indicators*. Paris: UNESCO.

Consortium of National and University Libraries (CONUL) (2004) Integrating information Literacy into the curriculum. Available at: <https://library.nuigalway.ie/media/jameshardimanlibrary/content/documents/support/CONULACILbookletfinal.pdf>

Foggett, T. (2003). Information literacy at the primary school level?, *The Australian Library Journal*, Vol. 52: No. 1, pp. 55-63 DOI: 10.1080/00049670.2003.10721496

Irving, C (2011). National Information Literacy Framework (Scotland): Pioneering Work to Influence Policy Making or Tinkering at the Edges? *Library Trends*/Fall <https://www.ideals.illinois.edu/bitstream/handle/2142/31877/60.2.irving.pdf?sequence=2>

Noah, A. O. K. (Ed.) (2003) *Fundamentals of General Studies*. Lagos: Olu-Akin Publishers.

Open University, (2004) *Open University Library Services in collaboration with colleagues from the Centre for Outcomes-Based Education (COBE)*: www.open.ac.uk/cobe Revised June 2010.

- Roberts, J. C. & Bhatt, J. (2007), Innovative approaches to information literacy instruction for engineering undergraduates at Drexel University. *European Journal of Engineering Education*, Vol. 32: NO. 3, pp243-251
- SCONUL Advisory Committee on Information Literacy (1999). Information skills in higher education: a SCONUL position paper prepared by the Information Skills Task Force, on behalf of SCONUL. Available at http://www.sconul.ac.uk/groups/information_literacy/seven_pillars.html
- SCONUL Working Group on Information Literacy (2011) The SCONUL Seven Pillars of Information Literacy Core Model For Higher Education <https://www.sconul.ac.uk/sites/default/files/documents/coremodel.pdf>
- Tilvawala, K., Myers, M. D. & Andrade, A. D. (2009). Information literacy in Kenya, *The Electronic Journal on Information Systems in Developing Countries* Vol. 39 No. 1, pp.1-11 <http://www.ejisd.org>
- UNESCO Information for All Programme (IFAP) (2008) <http://www.unesco.org/new/en/communication-and-information/intergovernmental-programmes/information-for-all-programme-ifap/priorities/information-literacy/>
- Wawrzaszek, S. V. & Wedaman, D. G. (2008), The academic library in a 2.0 world. *Educause Center for Applied Research. Research Bulletin*, 19. from <http://www.educause.edu/ecar>
- Younger, P. (2005). An analysis of skills and qualities required by LIS employers 2004-2005, *Library and Information Research*. 29:92.32-51.