INFORMATION LITERACY: A CHANGE AGENT IN NIGERIAN UNIVERSITY EDUCATION

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Abstract
The importance of information literacy in educational development cannot be over-estimated. The information literacy program's mission is to support, promote and enhance teaching, learning and research in universities. This work studies information literacy as an agent of change in Nigerian University education. Descriptive survey research design was adopted. Four research questions guided the study. The total population from which sample was drawn is 3000 student library users of Chukwuemeka Odumegwu Ojukwu University, and Paul University both in Anambra State. A sample of 100 students was used. Accidental sampling technique was adopted. A questionnaire entitled “Information Literacy Questionnaire (ILQ)” was developed by the researchers, validated by experts and used for data collection. Cronbach Alpha was used to obtain a reliability coefficient of 0.84. Data were collected and analyzed using simple mean score, with 2.50 benchmark set for accepted or rejected items. The major findings of the study show that the students possess information literacy knowledge; information literacy is an agent of change in education. Low level of computer literacy amongst others was identified as impediment to information literacy. Based on the finding, the study recommended among others that information literacy should be included in tertiary institutions curriculum, with lecturers and librarians teaching it. Students, lecturers and librarians should be computer literate.

Key words: Information, Information literacy, Change agent, Nigerian Universities, Education.

Introduction
The word information means different things to different people. According to Alhassan and Saka (2008), information is data that has been processed and organized for retrieval in whatever format. Issa, Bashir, and Saka (2012) see information as processed data, facts or ideas meant to convey intelligible meaning for use. Luka (2011) concluded that it is a value, which is used in planning and which serves as stimulus that helps in decision making. Succinctly, information is a correct and timely data, that when used for decision making increases understanding and decreases uncertainty. For students to put available information to adequate use,
they must be information literate. Information literacy knowledge has to do with the ability to recognize information need, identify, evaluate and use information effectively (Saad and Zainab, 2002). In the opinion of Ogbo, Uzuagba, and Nwebiem (2017), information literacy involves having the knowledge of information sources in one’s subject, ability to construct effective research strategies, ability to use information sources appropriately, cite and create references. Association of College and Research Libraries ACRL, (2002) defined information literacy as the set of skills needed to find, retrieve, analyze and use information. Information literacy is important owing to the amount of information that is available in this information society.

The United Nations Educational, Scientific and Cultural Organization UNESCO, (2004) opined that literacy involves a continuum of learning to enable individuals achieve their goals, develop their knowledge and potential, and participate fully in their community and wider society. Literacy promotes training of citizens on the power of use of information resources and information. Information literacy skills are helpful to everybody in order to carry out their occupations efficiently and successfully. This is in conformity with the views of researchers such as (Johnson & Drebber, 2003; Anator & Filson, 2004) that explained information literacy as social need and access for the huge amount of information in today's information society. For students to be information literate, they must have computer literacy, information technology literacy, library skills and information skills (Bruce 2003). Thus, information literacy knowledge is a necessary ingredient that stimulates education.

Education is a means by which a person acquires appropriate knowledge and skills as well as abilities and competencies, attitude, appropriate values, and other forms of behaviour of positive value to the society. Education stands at all times as an instrument per excellence for achieving growth, progress, and national development. Advanced nations of the world have attained a high level of social, economic, scientific, and technological advancement through well planned and implemented educational systems (Ifeanacho & Nwachukwu, 2015). To produce students that can thrive in today’s economy, education, a process of acquiring knowledge and skills, must be reshaped in tandem to contemporary issues. Education is time dependent and operates in a world of change. It is thus driven by the societies changing values, attitudes, expectations and needs. Students are not just expected to sit and listen to lecturers, but to participate, interact, shape the way their learning environment operates so as to gain knowledge and information that will help them excel in life.

Education is generally categorized into three levels; primary, secondary, and tertiary levels of education. Tertiary education takes place in tertiary institutions. It is obtainable in all institutions of higher learning like, colleges of education, polytechnics, monotechnics, and universities. This work therefore focuses on university education in Nigeria. According to Alhassan & Saka, (2008), the major aim of setting up any university is to encourage and promote scholarship as well as conduct research in all fields of learning and human endeavours. Like their counterparts all over the world, Nigerian universities design their programmes of study and provide the necessary infrastructure to meet these goals (Alhassan & Saka, 2008). Students can only make maximum benefit from university education by being well informed. The university library being the most significant of all the infrastructures in the university, provides the information required. This is because, the library is the main source of information for developing knowledge and research. No wonder, Abu, Isa, Oyedum, and Bitagi (2017) reiterated that the library is the backbone of any university. Academic library achieves its goal through a number of services which includes collection development, lending, interlibrary loan, library consortium, virtual library, reference services and information literacy. These library resources and services will help students in the university to achieve information literacy knowledge.

The university library is positioned to provide and promote access to information and knowledge for undergraduates, postgraduates, lecturers and researchers. These skills empower the students with the critical skills which will help them to become independent lifelong learners. Information literacy concept evolved from several basic library concepts such as library instruction, bibliographic education, user education and
information literacy programmes. Simply being exposed to a great deal of information will not make students informed citizens unless they have these skills to learn how to use the information. An information literate student should have the skill to access information, evaluate it, and make appropriate use of the information in question. This attribute triggers a positive change in all levels of education, especially university education.

The only thing that is constant is change. According to Webster, M. (2002), change means to alter, undergo variation, pass from one phase to another. It is a succession or substitution of one thing in place of another. Everything in this world changes. Change could be either positive or negative. Positive change results into growth, development, and expansion. Negative change ends up in retardation and backwardness. Information literacy serves as an agent of positive change to education in general, and university education in particular. How? In the move towards an information society, the demands placed on education system will change, many have argued that there will be less need for formal education to transmit a fixed corpus of knowledge, and much more need for the development of cognitive skills, the skills of evaluation, analysis, problem solving and learning to learn (Udem, 2013; Newton, 2005; Ogbo, Uzoagba, & Nwebiem, 2017). The four generic qualities of a university graduate according to Bundy (2013) are that a graduate:

- operates effectively with and upon a body of knowledge of sufficient depth to begin professional practice
- is prepared for lifelong learning in pursuit of personal development and excellence in professional practice
- is an effective problem solver, capable of applying logical, critical, and creative thinking to a range of problems
- can work both autonomously and collaboratively as a professional. These four qualities demand information literacy.

New teaching and learning practices are also important for this reflection. Digital and multimedia-based learning resources, like computers are required for student-centered teaching. Digital libraries and repositories facilitate the reuse of digital content, allowing access to a variety of sources and boosting the formation of critical thinking and the creation of more complex ideas, while encouraging students to use the resources and reinterpret them (Sanches, 2018). Students must have practical knowledge of computer, in other words, an information literate student must possess computer skills extensively. To develop all these skills information literacy is crucial. Summarily, a graduate should be able to locate, evaluate, manage, and use information in a range of contexts. Information literacy makes the difference. It is anticipated that schools will move towards a more project work, with students taking more responsibility for their own learning and developing the kind of autonomous practices that will enable them to grow as lifelong learners. Information literacy plays an integral part in this change, and it has been seen as an agent or stimulus for the change. Any factor or phenomenon that facilitates change is a change agent or an agent of change.

There are some factors that militate against information literacy in Nigerian university education. These factors distort the students acquisition of information literacy skills. No wonder Agbanu and Nwankwo (2018) lamented that low level of computer literacy, students have phobia for information literacy, lack of professionals trained in information literacy constitute serious limitation to students’ possession of information literacy. Some of these negative factors may come from students, institutions, librarians, or the lecturers (Udem, 2013). The challenge facing Nigerian university education and libraries is just how to persuade their institutions to a faster educational mindset shift which will recognize the issue (information literacy), give it the highest priority and permit it to be addressed in a well-funded way. Having known that the major objective of university education is to produce graduates with lifelong learning abilities. Information literacy is a recognized lifelong learning and graduate attribute that has its root in Library and Information Science. It is against this background that this paper is set to determine how information literacy facilitates positive change in university education in Nigeria.

**Objective of the study**
The general objective of this study is to determine the extent to which information literacy serves as a change agent in university education in Nigeria. Specifically, this study was designed to:

1. Ascertain the level of information literacy among Nigerian University Students.
2. Find out how information literacy can facilitate change in education.
3. Determine the impediment to information literacy in Nigerian Universities.
4. Suggest possible solutions to the problems of information literacy.

**Research questions**

1. To what extent do Nigerian University Students of possess information literacy?
2. How does information literacy facilitate change in education?
3. What are the impediments to information literacy in Nigerian Universities?
4. What are the possible solutions to the problems of information literacy?

**Review of related literature**

Town, a prominent researcher on information literacy, as a resource person at the international conference on information literacy held in Glasgow concluded that information literacy is knowledge rather than simple skill, achieved by education rather than training, created through partnership between professionals and is a lifelong endeavour that is contextual in field and service access (Town, 2002). According to Newton (2005), information literacy is all about detecting the need for information, the available information resources, knowing how to find information, the need to evaluate results, being able to work with results, how to communicate, share, and manage one’s research findings. In the views of Kovalik, Jesen, and Schloman (2010) information literacy skills refer to an individual’s ability to recognize when there is need for information and to be able to identify, locate, evaluate, and use information to effectively solve the problem at hand.

It has been proven beyond reasonable doubt by scholars in the field of information literacy, that students with information literacy capacity score higher on assessment criteria and in examinations (Agbanu, & Nwankwo, 2018; Udem, 2013; Kurupu & Gruber, 2006; Usman, 2005; Ranaweer, 2008; Ojedokun, 2007). For creative and functional education, Bruce (2002) stated that information literacy skills promote academic achievement of both students, teachers and even researchers. Osaigbovo, (2013) opined that, functional education is referred to as educational system that works, bring about behaviour changes, possess core values, skills acquisition and produces knowledgeable citizens, self-reliance individual, manpower development and national development. Creativity on the other hand is the entire process by which ideas are generated, developed and transformed into values. It comprises what people commonly mean by innovation and entrepreneurship (Agbowuro, Saidu & Jimwan2017). To this end, one sees why Bruce (2002) quickly concluded that information literacy is central to the pursuit of lifelong learning. Individuals need to acquire information literacy skills as studies have shown that the research skills of undergraduates appear to be poor (Ogbo, Uzoagba, &Nwebiem,2017;Ojedokun, 2007). Kurupu and Guruba (2006) found out that students do not possess the skills needed to locate the best resources for their studies and research. Information literacy as a concept, and as the critical competency for lifelong learning, engineered by librarians serve as change agent in university education within Australia and even beyond (Bundy,2013). He further described information literacy as a 21st century smartcard.

A number of factors have been identified as impediments to information literacy acquisition by students. Lack of knowledge for internet access, lack of access to computers, computer illiteracy, negative teaching approach, absence of collaboration between educators, librarians and administrators, student’s negative attitudes and backgrounds (Whitmire, 2001; O’shea, 2003; Jacobs, Rosenfeld, and Harber, 2002). In his study on information literacy challenges, Rekha, (2009) identified four categories of information literacy challenges as mind set, absence of collaboration, poor domain of teaching, and lack of knowledge. However, Akakandelwa (2010) posits that most institutions face the following challenges in the provision of information literacy: no strategic plan for information literacy, inadequate information and communication technology infrastructure, lack of human resources trained in information literacy, lack of management
support and insufficient funds. SCESAL (2010) lamented that those working on information literacy in Africa face difficulties because the programs are new in this part of the world.

The challenges to the Nigerian student’s possession of information literacy can be solved if the Education Ministry includes information literacy in secondary and tertiary institution’s curriculum (Ogbo, Uzoagba, &Nwebiem, 2017). In the views of Udem, (2013), the frequent assessment of student’s information literacy competencies by library, information professionals, and lecturers will help determine their strengths and weaknesses. They further affirmed that it would help strengthen the information literacy programs in the universities. No wonder, Bruce, (2002) concluded that successful information literacy programs do not only focus on teaching information skills, they focus on designing learning experiences that require the use of information skills.

Methodology
Descriptive survey research design was adopted. The total population from which sample was drawn is registered student library users of Chukwuemeka Odumegwu Ojukwu University Library Uli and Paul University Awka, Anambra State. There are about 2300 and 700 registered users respectively for the 2017/2018 session when this study was being conducted making the total population of 3000. A sample of 100 students was used. Accidental sampling technique was adopted. A 27 item questionnaire entitled “Information Literacy Questionnaire (ILQ)” was developed by the researchers, face validated by experts and used for data collection. The construction of the questionnaire was guided by the views and findings from the review of related literature. It was a 4-point scale of Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD). ILQ has two parts (1&2) that elicited the extent of agreement of the respondents to the item statements. Part ‘1’ was the demographic data of the respondents while Part ‘2’ contained four sections separated into four clusters. Section A of Part 2 consisted of four items that were concerned with level of information literacy. Section B contained ten items on information literacy as a change agent in education. Section C comprised eight items on information literacy challenges, and Section D proffered solutions to the problems. Using Cronbach Alpha, the reliability of the instrument was tested using 20 student library users from Imo State University Owerri. A reliability coefficient of 0.84 which seems enough for the study was obtained. The questionnaire was administered through personal contact by the researchers. Out of the 100 instruments administered to the respondents, 80 were completed and returned. This represented about 90% of the response rate. The data was analyzed using simple mean score. Items are accepted if they are 2.50 and above. Items below 2.50 were rejected.

Presentation of Results and findings
Table 1: Information literacy among students

<table>
<thead>
<tr>
<th>S/N</th>
<th>Questions</th>
<th>Mean</th>
<th>Decision</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Understanding when information is needed</td>
<td>2.50</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Knowing how to locate information</td>
<td>2.95</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Knowing how to evaluate information</td>
<td>2.35</td>
<td>Rejected</td>
</tr>
<tr>
<td>4</td>
<td>Understanding how to use information</td>
<td>2.70</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
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</table>

The results in Table 1 show that out of the four items three were accepted while one of the items was rejected. Item 2, Knowing how to locate information has a highest level of acceptance of 2.95. Item 1, Understanding when information is needed, has the lowest acceptance level with mean score of 2.50. Items 3, knowing how to evaluate information, was rejected by the students with the mean score of 2.35.

Table 2: Information literacy as educational change agent

<table>
<thead>
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<th>S/N</th>
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<th>Mean</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Information literate students perform better in exam than information illiterate students.</td>
<td>3.55</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
Information literacy is important for life-long learning.

Information literacy skill is needed for evaluating information sources.

Information literate students are good researchers.

Students Over dependent on internet is because of low information literacy skills.

Information literacy promotes independent learning.

Information literate students do not involve in plagiarism.

Information literate students use indexing and abstracting journal.

In Table 2, the result shows that all the ten items were accepted by the respondents. Item 1 which states that, Information literate students perform better in exam than non-information literate students has the highest level of acceptance with the mean score of 3.55. On the contrary, item 6, information literacy promotes independent learning, has the least level of acceptance with mean score of 2.50.

<table>
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<th>S/N</th>
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<th>Mean</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lack of seriousness on lecturers in teaching information literacy.</td>
<td>2.52</td>
<td>Accepted</td>
</tr>
<tr>
<td>2.</td>
<td>Lack of professionals trained in information literacy</td>
<td>2.81</td>
<td>Accepted</td>
</tr>
<tr>
<td>3.</td>
<td>Lack of understanding of the concept of information literacy.</td>
<td>3.66</td>
<td>Accepted</td>
</tr>
<tr>
<td>4.</td>
<td>Lack of well-equipped library where information literacy can be practiced.</td>
<td>3.20</td>
<td>Accepted</td>
</tr>
<tr>
<td>5.</td>
<td>Lack of access to computers.</td>
<td>2.55</td>
<td>Accepted</td>
</tr>
<tr>
<td>6.</td>
<td>Students don’t see the relevance of information literacy to their academic work.</td>
<td>3.00</td>
<td>Accepted</td>
</tr>
<tr>
<td>7.</td>
<td>Low level of computer literacy</td>
<td>2.50</td>
<td>Accepted</td>
</tr>
<tr>
<td>8.</td>
<td>Students have phobia for information literacy</td>
<td>1.90</td>
<td>Rejected</td>
</tr>
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</table>

It could be noted in Table 4, that all the items for impediments to information literacy skills were accepted by the respondents except number 8 item. Among the accepted items, item 3 (Lack of understanding of the concept of information literacy) has the highest level of acceptance with the mean score of 3.66. While item 7 (Low level of computer literacy) has the lowest level of acceptance at 2.50. However, the respondents rejected item 8 (Students have phobia for information literacy) with mean score as low as 1.90.

<table>
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<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lecturers should be serious in teaching information literacy.</td>
<td>3.5</td>
<td>Accepted</td>
</tr>
<tr>
<td>2.</td>
<td>Academic libraries should be well-equipped for information literacy practice.</td>
<td>3.8</td>
<td>Accepted</td>
</tr>
<tr>
<td>3.</td>
<td>Computers should be made available for students use in the libraries</td>
<td>2.6</td>
<td>Accepted</td>
</tr>
<tr>
<td>4.</td>
<td>The library should organize free computer training for students</td>
<td>2.9</td>
<td>Accepted</td>
</tr>
<tr>
<td>5.</td>
<td>Students should develop interest on information literacy.</td>
<td>2.5</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

The results in Table 4 shows that all the suggested items for remedy to the problems of information literacy were accepted by the students. Item number two which says that academic libraries should be well-equipped
for information literacy practice, has the highest level of acceptance with the mean of 3.8. Item 5 (Students should develop interest on information literacy) has the lowest acceptance with the mean of 2.5.

Discussion of findings
Table 1 revealed that the student library users of the two university studied possess information literacy. They have the knowledge of when information is needed, how to locate information, evaluate information and use information. Hence all the item in Table 1 were accepted, except item number 3 that was rejected by the students. This shows that the students have information literacy knowledge. This result is in line with that of Agbanu and Nwankwo (2018) who found that students demonstrated high proficiency in information literacy knowledge. The result however varies with the findings of Islam and Tsuji (2010) who found that students demonstrated very low proficiency in information literacy knowledge.

Table 2 revealed that information literacy skill is indeed an educational change agent. Hence, the respondents accepted all the items in table 2. This is in line with Ogbo, Uzoagba and Nwebiem (2017) whose study discovered that information literacy skill is a tool for social development which includes education. This assertion is further supported by Bruce (2002) that information literacy skills promote academic achievement.

Table 3 revealed different challenges which hinder university students from acquiring information literacy skills. The students accepted seven out of the eight identified impediments to information literacy skills. However, the students rejected having a phobia for information literacy. This is in line with Udem, (2013) who found that postgraduate students face many challenges in their attempt to acquire information literacy skills.

Table 4 Shows that there are solutions to the problems of information literacy among university students in Nigeria. Hence the students accepted all the suggested solutions. Implementation of the suggested solution would maximize the level of information literacy among students.

Conclusion and recommendation
The paper examined information literacy as a change agent in Nigerian education. It revealed that students possess information literacy knowledge because they know when information is needed, how to use information, and how to store information for future use. It identified information literacy as an educational change agent. There are also some impediments/challenges to information literacy ranging from lack of seriousness on lecturers in teaching information literacy to student’s phobia to information literacy. The above listed challenges, when properly addressed, will consolidate information literacy as an agent of change in education. The researchers therefore recommend that;

1. Information literacy should be included in tertiary institutions curriculum, with lecturers and librarians teaching it.
2. The management of universities should endeavour to provide functional ICT infrastructure and well equipped library to strengthen information literacy programme
3. Students, lecturers and librarians should be computer literate.
REFERENCES


