Introduction

Variously referred to as "user education," "library skills," "library instruction," "bibliographic instruction," "evidence-based learning," "problem-based learning," etc., information literacy skills open the gateway of information to students and all information seekers and users across disciplines. It is a way of exposing users to the world of knowledge. It helps students know when information is required, how to locate, evaluate, organize, and effectively create, use, and communicate it. It is a way of nurturing and sustaining lifelong learning.

In Africa, information literacy has not been accorded its position in the higher education curriculum (Ojedokun 2005). In Nigeria the supervisory organ for universities, the National Universities Commission (NUC), makes it mandatory for all universities in Nigeria to include library literacy course in their curriculum (Noah, 2004). It is unfortunate that as good and lofty as the NUC directive is, only few universities have paid serious attention to it and offer it as a credit-earning course. While many universities offer information literacy as a non-credit-earning course, others have library orientation. Some universities cluster it with other General Studies courses, and in the few universities that offer it as a credit-earning course, the unit and status of the course is not enough to achieve the desired results. While it is required in some universities, it is an elective in others. The time and space allotted to the course is not sufficient for students to grasp the salient points.

In many universities that offer the course for credit, the emphasis is on library and reading skills with utter neglect of computer and technology literacy. For example, the objective of the Lagos State University GNS 101: Use of Library explicitly emphasizes library skills in its objectives:

- To inculcate in the students library skills for pursuing independent acquisition of knowledge and learning; and,
- To help them (students) develop awareness and appreciation of the potentialities of the library in support of their academic career (Noah, 2004).

The situation is not peculiar to Nigerian universities; it also affects other universities in Africa. The report of the survey of information-seeking habits of graduate students of the University of Ghana by Badu (1991) revealed that there is a low level of understanding of the library and little use of bibliographic tools. He concludes that the course content and duration of the programme and the lack of knowledge of the concepts and the low use of library resources by students show that the programme as it is presently pursued is a waste of time. He recommends that the user education programme be integrated with official school curriculum.
Writing on his experience at South African universities, Dulle, (2004) reveals that most universities in Africa practice mainly user education and library orientation, most of which lack the capacity to produce information users who exhibit adequate information literacy attributes.

Reporting the adoption of information literacy as credit-earning course at the University of Malaya, Chan (2003) enumerates the following problems with informal user education:

- the programmes were not accorded any official status and this did not receive the support of students or academic staff;
- Students were not given any hands-on experience, meaning that there was no formal assessment of the effectiveness of the programmes;
- The programmes were too short to be really effective.
- As most students had no or very limited experience with library use and resource-based learning, they did not think it worthwhile to expend time and efforts to learn to use the library

From the foregoing it is clear that there are information literacy practices among African universities but emphasis is on library literacy skills. This study will analyze credit-earning information literacy curricula of three African universities and suggest ways of improving them.

**Information Literacy**

Information literacy encompasses knowledge of one’s information concerns and needs, and the ability to identify locate, evaluate, organize and effectively create, use and communicate information to address issues or problem on hands. It is a prerequisite for participating effectively in the information society and is part of the basic human life long learning (UNISIST, 2003).

According to Doyle (1992), an information literate person is one who:

- recognizes the need for information;
- formulates questions based on information needs;
- identifies potential sources of information;
- develops successful search strategies;
- accesses sources of information, including computer based and other technologies;
- organizes information for practical application;
- integrates new information into an existing body of knowledge; and
- uses information in critical thinking and problem solving.

Information literacy is similar to, and cannot be divorced from, critical thinking. Critical thinking is defined by Foundation for Critical Thinking (2004) as the “intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.” A critical thinker:

- raises vital questions and problems, formulating them clearly and precisely;
- gathers and accesses relevant information, using abstract ideas to interpret it effectively
- comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards;
- thinks open-mindedly within alternative systems of thought, recognizing and assessing, as need be, their assumptions, implications and practical consequences; and communicating effectively with others in figuring out solutions to complex problems. (Foundation for Critical Thinking 2004)
Being information-literate requires knowing how to clearly define a subject or area of investigation, selecting the appropriate terminology to express the concept or subject, formulating a search strategy, analysing the data collected for value, relevancy, quality, and suitability, and subsequently turning information into knowledge (ALA, 1989).

Writing on the impact of information literacy on students, ALA (2004) reports that to take fullest advantage of problem-based learning, students must use critical thinking skills, requiring them to become skilled users of information sources in many locations and formats, thereby increasing responsibility for their own learning. The report elaborates that gaining information literacy multiplies the opportunities for students’ directed learning. Information literacy is a key component in lifelong learning that extends learning beyond the classroom.

**Information Literacy, Information Technology, Computer Literacy, and Library Skills**

Many people mistake information literacy for information technology literacy, computer literacy, or library literacy skills. Information literacy goes beyond these other sets of skills (National Research Council 1999). According to Shapiro and Hughes (1996), information technology literacy is the ability to continually adapt to and use innovations in information technology. It helps to understand the human, organizational, and social context of technologies as well as criteria for evaluation (Ojedokun, 2007). Library literacy skills are concerned with how to retrieve, evaluate, and use information resources in the library. Information literacy skills focus on contents, communication, analysis, searching, and evaluation, independent of particular technologies (ALA, 2004).

Gilton (1994) observes that information literacy goes beyond technology, since technology alone does not guarantee quality learning experience. Information literacy is not a technique, but a goal for learners.

**University Education and Information Literacy**

One reason that universities are established is to train a high-level workforce. ALA (2004) describes producing lifelong learners as critical to the mission of educational institutions. Ubogu (2006) asserts that the mission of academic libraries includes helping produce students who are information literate and prepared for lifelong learning. As students become active learners, emphasis will shift from a teacher-centred to a learner-centred learning environment.

**Methodology**

Course outlines were analysed and measured against ALA Information literacy Standards for Higher Education (2004). Structured interviews were conducted with librarians at the Federal University of Technology, Akure and Lagos State University, Lagos to get in-depth knowledge of their information literacy programmes.
### Table 1: Lagos State University, Lagos, Nigeria

**GNS 101: Use of Library**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course title</th>
<th>Course outline</th>
<th>No of Unit</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNS 101</td>
<td>Use of Library</td>
<td>Historical development of library: Evolution of libraries in Nigeria; Types and functions of libraries with emphasis on university libraries (including departments and unit herein); Library and education Library catalogue (Card, OPAC etc) and classification; Library resources and services; Copyright and its implications on libraries; ICT in libraries including e-learning, e-materials database resources, etc.; Libraries and research activities</td>
<td>2</td>
<td>Compulsory</td>
</tr>
</tbody>
</table>

Source: LASU GNS 101: Use of Library Curriculum, 2004

### Table 2: Federal University of Technology, Akure, Nigeria Ondo State

**GNS 104: Information Retrieval**

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<tr>
<th>Course code</th>
<th>Course title</th>
<th>Course outline</th>
<th>No of Unit</th>
<th>Status</th>
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<tbody>
<tr>
<td>GNS 104</td>
<td>Information Retrieval</td>
<td>History of Library: Library materials (Reference, books and their features); Serials publications (Journals, conference proceedings, Newspaper etc); Classification (Types of classification schemes, DDC, LC, notation and shelf arrangement); Library catalogue (types and kinds of library catalogue e.g. card catalogue, OPAC); Scientific, technical and report writing (format of presentation, citations and quotations, bibliography); Use of computer and Audio visual resources</td>
<td>1</td>
<td>Required</td>
</tr>
</tbody>
</table>

Sources: Federal University of Technology, Akure GNS Curriculum
Table 3: University of Botswana, Botswana

<table>
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<tr>
<th>Course code</th>
<th>Course title</th>
<th>Course outline</th>
<th>Status</th>
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<tbody>
<tr>
<td>GEC 121</td>
<td>Computing and information skills fundamental I</td>
<td>Concept of information, organization, information access tools: reference sources</td>
<td>2C</td>
</tr>
<tr>
<td>GEC 122</td>
<td>Computing and information skills fundamental II</td>
<td>Introduction to periodical literature, indexes &amp; abstracts and full electronic databases; legal issues of information use; evaluation of information resources</td>
<td>2C</td>
</tr>
<tr>
<td>GEC 221</td>
<td>Information Management Skills</td>
<td>Searching CD – ROMs</td>
<td>Optional</td>
</tr>
<tr>
<td>GEC 222</td>
<td>Problem solving with spreadsheet</td>
<td>Searching subject gateways</td>
<td>Optional</td>
</tr>
<tr>
<td>GEC 223</td>
<td>Web Application Skill</td>
<td></td>
<td>Optional</td>
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<tr>
<td>GEC 321</td>
<td>Multi media information presentation skills</td>
<td>Topic analysis, and organizing and synthesized, information for presentation</td>
<td>Optional</td>
</tr>
</tbody>
</table>

Source: University of Botswana GEC Courses, Oyedokun, AA and Lumande, E. (2005)

Analysis and Discussion of Findings

A critical and careful examination of the curricula of the three universities revealed that none adequately meet the requirements of information literacy skills for the students. While Federal University of Technology, Akure and Lagos State University (tables 1 and 2 above) concentrate on library literacy skills, University of Botswana (table 3) places a premium on computer and information technology literacy skills.

Ojedokun and Lumande (2005) attribute the introduction of computer and information technology into the curriculum of the University of Botswana to feedback from employers that graduates they recruited lacked information gathering and reporting skills. Their library systems are computerized, which makes it possible to teach the information technology component of the library system.

Responses from interviews with librarians at the Federal University of Technology, Akure and Lagos State University, Lagos reveal that there is little emphasis on computer and technology skills in their curricula because the courses are out-of-date, and were created when the emphasis was mainly on library literacy. They also attributed the content of the curriculum to the lack of automation in the library, although computerisation of their libraries is in progress and their information literacy curricula are under review.

Chan (2003) reports that a library orientation was in place before the library was automated, but with the introduction of an automated library system, students needed more extensive user education.

The information literacy programmes of the three universities also differ in the time, units, and status allotted to the course. While the course is taught up to 300 level, compulsory at 100 level and optional at 200 and 300 in the University of Botswana, it is only taught at the 100 level as a foundation and as a required courses respective at the Federal University of Technology, Akure and Lagos State University, Lagos (tables 1 and 2 above).
Information literacy is taught by librarians at the Lagos State University and Federal University of Technology, Akure while in the University of Botswana it is handled by the librarians and the staff of the Computer Science Department (Ojedokun and Lumande, 2005). This fell short of the Humes (2005) position that teachers, professors, teaching assistants, librarians, administrators, and the community must collaborate to develop ways to involve students not only in using classroom materials but also in using resources from broader community and the mass media.

Conclusion and Recommendations

Information literacy is the route to active participation in the information-driven society. It gives students the necessary skills and inculcates lifelong and independent learning skills which are a prerequisite for problem-based and problem-solving learning.

The curricula of the universities studied are deficient in one aspect or the other.

The study revealed that obsoleteness of the curriculum and lack of computerized library systems are the major factors for the deficiency in the curricula of the Federal University of Technology, Akure and Lagos State University, Lagos. It also attributed automated library systems to inclusion of ICT in the curriculum of the University of Botswana. Because the course is exclusively taught by the librarians in those two universities, emphasis is placed on library skills and not on computer literacy.

As a result of the foregoing, the following recommendations are made:

- Information curricula of the three universities should be reviewed and expanded to reflect computer, library, and IT literacy skills to make the learners truly information literate.
- Enough time, units, and status should be allocated by both Lagos State University, Lagos and the Federal University of Technology, Akure. The course should be taught up to at least the 200 level and should be made a compulsory foundation course. This will enhance the status of the course and help students take it more seriously.
- Design and review of the curriculum and teaching of the information literacy courses should be all-embracing. It should involve all stakeholders.
- While University of Botswana should include library literacy in its curriculum, library operations of the Federal University of Technology Akure and Lagos State University should be automated to enhance teaching of computer and information technology literacy skills.

References


