

TRANSFORMING NIGERIA UNDERGRADUATE TRAINING THROUGH INFORMATION COMPETENCY

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Abstract

Paper portrayed information competence as the ability to access, evaluate and use information to solve problems, and to communicate. Information literate people are those who have learned to learn. It is easier for them to learn because they know how information is organized - The paper suggested the integration of the traditional library literacy, computer literacy and communication skills for the development of information competencies amongst Nigerian undergraduates. It advocated the adoption of some core information competencies which have received universal application. It also identified some models of information literacy which could be applied in University faculties in Nigeria for training of undergraduates.

Introduction

Information competence should be considered by University Librarians in Nigeria as a critical skill for all students which will facilitate the effective use of available learning resources and instructional technology, especially in this era of ICT throughout the universities. Although there has been pockets of interest shown by University management in the development of courses such as library user education, library orientation, bibliographic instruction, computer literacy: These programmes do not have widespread and sustained efforts in many universities (Onwubiko, 2005). The production and use of information have continued to increase tremendously, multiplying exponentially at a bizarre speed. Knowledge has continued to be created, developed and reshaped at an alarming rate. This has been greatly encouraged by the emergence and developments in information and communications technologies.

It is thus very difficult now for some students to be able to even identify the need for, and locate a particular information. Amucheazi and Dike (2004) gave credence to this when they reported that while serving as panelists for project proposal presentations at undergraduate and master levels, they were struck by the relevance of information literacy education. They noticed that students needed to be drilled on information competencies. Today, there is clear agreement that all students need to be proficient computer and GSM users. They need to be ICT complaint in order to be able to sieve information faster and even cheaper. Kaufman (1997) concludes: "there is so much information today that the act of identifying and choosing the specific information one wants and needs has become an extremely complex task most people execute poorly,... our society requires complex information skills".

The convergence of the production of the information age and the growing awareness of the student memory loss of course content, lead to the collusion that a vital part of education must be in the students' ability to locate information for themselves. If students who graduate from our universities are unable to locate, synthesize and evaluate information, they will not have skills necessary for survival in any field. Moreover, even if student retention of course content was almost perfect, the rate of change of knowledge is so high that what students learn today, especially in certain fields, may not be accurate or relevant a few years later. For the world in which students now live and will live for the rest of their lives, they must be prepared to navigate successfully through this profusion of print media. The challenge facing the universities is to equip students with skills and knowledge that will enable them to live satisfying, productive lives in a world awash with information. This commitment to ensure the information competence of our students should form the basis of the efforts of the universities and their librarians.

Information competence as suggested in this paper is the fusing or integration of library literacy, computer literacy, media literacy, critical thinking, writing and communication skills (Kulthau, 1997). At the heart of information competence is the emphasis placed on production and application, as well as the consumption of information by university students, including the members of faculty. In other

words what competence are needed that would guarantee improved quality of life the students even after graduation? These principally include the ability:

- (1) To recognize when information is needed, and
- (2) To locate, evaluate and use effectively the information needed.

That is to say that, in addition to finding, analyzing and synthesizing information, students must be able to create information and communicate it effectively using various media.

Irving (2005) further explained information competence as a range of subordinate or, prerequisite, skills, those associated with reading, writing, searching, retrieving, organizing, processing, thinking, analyzing, and presenting information. It relates to not only what students do in the departments but also to students' use of information sources outside the university their future working lives. According to the Commission on Learning Resources and Instructional Technology (2001) competencies in information are both observable and measurable skills. On the other hand, library user education often involves guiding the users on what resources the library has and how to retrieve them, scanty introduction to the catalogue and classification, which are hurriedly done as part of the students orientation. Fresh students who are overwhelmed by size of academic libraries and their geographical layouts easily forget what they were told at orientation and end up visiting the library for reading and writing notes.

Therefore, for universities to ensure that students are competent users of information resources, they will have to determine those competencies which the students must achieve at three levels of their learning process, namely:

- When they arrive at the university
- Early enough in their university careers so that they can successfully pursue their degree programmes
- When they are about to graduate so that they can be prepared for post-graduate training or employment in their chosen profession (Curzon, 2006)

Core Competencies

A set of core competencies identified by several American Universities and which has received universal application can be adopted by Nigerian University Libraries in integrated process of:

- State a research question, problem or issue
- Determine the information requirement for the research question.
- Locate and retrieve relevant information.
- Organize information
- Analyse and evaluate information
- Synthesize information.
- Communicate, using a variety of information techniques.
- Use technological tools for accessing information.
- Use, evaluate and treat critically information retrieved from the mass media.
- Appreciate that the skills gained in information competences enable life-long learning.

There are also many tested models of information literacy, which can be accessed from the internet and be applied by university libraries in Nigeria. Some of them include:

- (a). Eisenberg and Berkowitz's Big 6 model. This involves six steps of information skills namely (1) Task definition (2) Information seeking strategies; (3) Location and Access; (4) Use of Information; (5) Synthesis (6) evaluation.
- (b). Guided inquiry: by Carol Kuhlthau and Ross Todd (1997). This is a seven step skill of (1) Initiation (2) Selection (3) Exploration (4) Formulation (5) Collection (6) Presentation (7) Assessment
- (c). Striping and Pitts research process model (1999). This is eight-step model namely: (1) Choose a broad topic (2) Get an overview of the topic (3) narrow the topic (4) Develop a thesis or statement of purpose (5) Formulate question to guide research (6) Plan for research and production (7)

Find/analyse/evaluation sources (8) Evaluate evidence, take notes/compile bibliography (9) Establish conclusions (10) Create present final product.

(d) Information skills model of Maryland and NCET(1996)

(e) Model of digital information fluency.

Because information literacy is very important in any educational career from primary school postgraduate work, its methodology has been extensively investigated and adopted in many schools in the advanced countries, including Nigeria.

Strategies for Implementing a Programme for Information Competence in Nigerian Universities.

Programmes to develop the information competence of Nigerian undergraduates has been limited to the library user education and/or library orientation conducted in academic libraries but not reinforced in the curriculum of academic department. Collaboration of academic departments and the libraries in developing information skills has equally not been widespread. For effective collaboration of departments and libraries in implementing programme, there must be a strong consensus between the academic departments and the university libraries to integrate such a programme horizontally and vertically across the curriculum. A 'quick fix' approach in which a stand-alone course is taken once in the student's career cannot meet the information needs of the students.

One way for achieving the goal of information competence is through a three stage process which the fundamentals of information competence are introduced in orientation course and further developed by being embedded in general education courses popularly called general studies, and are reinforced and amplified in the major areas. Ideally the programme can be integrated through all courses at all levels of the university training.

A. Implementation of Information Competence in a first year Orientation/Transition Course

This is achieved by making sure that students are aware of the information resources available to them in their libraries and taught as orientation course. At this stage emphasis is placed on students acquiring information skills. However, because of the orientation nature of the programme, the component devoted to information competence is usually brief.

B. Implementation of Information Competence in General Education

Since the ability to use information effectively and wisely is crucial to a student's success in higher education, it seems natural to incorporate information competence in the general education curriculum required of all students. It would be added as a stand-alone course dealing with the topic or it could be added as a component in several or all of the courses including the General Studies Curriculum.

C. Implementation of Information Competence in the Major Areas.

Whereas it is possible to identify competencies that all students should have, sometimes additional competencies are needed by students majoring in particular disciplines. Some aspects of information competencies are peculiar to a specific discipline e.g. Architecture, and must therefore, be integrated into the major area. On the other hand emphasis on information competencies is placed in part or all of the several courses required in the major.

D. Implementation of Information Competence as Add-on to Another Course

Here the faculty develops an information competence programme that treats information competence as an enhancement to the already established course in the disciplines. In this case a student enrolled in a department gains one extra unit of credit for completing the information component developed by the faculty teaching this course in consultation with the librarians. This is the trend at the department of Educational Foundations in Enugu State University of Science and Technology. Here all education students earn two credits by passing the

information skills offered to non-library students by the staff of library science option.

Method of Assessment of Students Competencies

There are various methods of assessing students' achievements. Each method depends on the ways the information competences are implemented in the university. Student's mastery of the skills of information competence could be assessed through a standardized test or through a performance or demonstration of the skills. Assessment would be course-based or competency-based. In course-based assessment, a student who successfully mastered the requisite skills is deemed to have passed.

But in competency-based assessment, skills are judged or evaluated apart from students' performance in a class. However, in Nigerian universities, because of inherent abuse of examination through all sorts of examination malpractices, it is recommended that competency-based assessment may be a better option for assessment of students' information competences.

Another approach in assessing information competence is for the university to award academic credit to the course on the basis of the students demonstrating mastery of skills as opposed to their simply taking a course in information competence. A more effective approach is for the university to institute a programme of information competence and require the students to demonstrate mastery of it. Students shall be given ample opportunity to acquire the necessary skills through workbooks, computer tutorials classroom instructions, etc. And when they believe that they have mastered the competencies identified, they can apply for an assessment and evaluation. Passing the assessment certifies that the student has completed this requirement for graduation. This is the practice in many American and European universities.

Problem of implementation of information competencies in Nigerian Universities

Although many Nigerian universities recognize the need for information competence among graduating students, majority of them have not taken appropriate actions to implement it in their faculties and departments. Reasons for non-implementation include:

First, many of the academic staff themselves need to have their own skills enhanced. With the rapid pace of technological change, skills need continual updating and renewing. Clearly the need for staff development of information skills is paramount. Unfortunately, staff development is hampered by lack of fund and lack of time off for staff to undertake training. This is due to perennial brain drain in many departments. -

Secondly is the lack of collaboration between the academic department and the university library staff. There are no incentives or rewards offered to academic librarians in other encourage such collaboration.

Despite these problems that militate against the development of a programme in information competence in the universities there are equally strong counter-balancing factors. First, Nigerian universities must be teaching institutions instead of giving undue preference theoretical researches that have no immediate benefits to the society. By placing more emphasis in teaching, universities will dedicate themselves and their scarce resources to the enrichment of the lives of students. Again, emphasis in teaching will be in tune with student's need and more adaptable to changes in curriculum that will prepare the students for greater opportunities in the future. Also as student-centred institutions, the universities will prepare well-rounded, educated students who have learnt how to learn, and also professionals who can enrich the economic, social and cultural life of their society. As information has changed the workplace, so the need to be information competent will affect students entering the world of work.

Conclusion/Recommendation

Before universities can embark on a useful programme of information competencies undergraduates, certain conditions must necessarily prevail namely:

1. A body such as NUC that determines the programmes of universities must as a matter necessity and standardization ensure that students who graduate from Nigerian universities are information competent.
2. The NUC should undertake a systematic assessment of student's information competence to develop a benchmark.
3. It should develop a model of information competence skills for students entering the university and graduating from university.
4. NUC must equally develop a computer software that enables the teaching of information competence.
5. It should also develop workbooks and checklists for fresh students to assist the departments with the teaching of information competences.
6. Finally NUC should collaborate with textbook publishers to help with the concept of information competence into textbooks.

References

- Amucheazi. O.N. & Dike V.W.(2004). Information Literacy Competencies for School Librarians.Nigerian School LibraryAssociation. 5(1)47-52.
- Commission of Learning Resources and Instructional Technology (2001). Washington: CLRIT
- Curzon, S. (2000). Academic Senate Documents and Information Competencies Final Report. California State University.
- Eisenberg & Berkowitz.The Big 6 model at (Eisenberg & Berkowitz (2006) at [http:// big 6.comf](http://big6.comf)).

Herring, J. Plus Information Skills Model at <http://athene.riv.scus.edu.au/mjherring/plus/default.htm>.

Herring, J's Plus Model site at <http://jimmy.gmvc.ac.uk/usr/jheri/plus/default.htm>.

Herring, J.E. (2005). Teaching Information Skills in Schools. London: Library Association Publishing.

Information Skills Model of Marland and NCET (1996) at <http://curriculum.beta.org.uk/docserver.php?docid=1999>.

Irving, A. (2005). Studying information skills across the curriculum. London: Heinemann.

Kaufman, P.T. (1999, Nov. 15), Information Competence. Library Journal, 117(19)37-39.

Kulthan c. and Todd, Ross (1997) Guided Inquiry at http://www.cissl.scfls.rutgers.edu/guided_inquiry/implementation.html.

Kathau, C.C. (1997). Information Skills for an information Society. A Review of Research. An information Analysis project (1997) Syracuse, New York: ERIC.

Model of Digital Information. Fluency at <http://cit.imas.edu/>.

Onwubiko S.N. (2005). Learning and Information Skills: The Principles of Access; Evaluating and Use of Information. Enugu: Kite Publishers.

Stripling & Pitts Research Process Model. (1999) at <http://witloof.s.su.edu/courses/250/loer.escher/model.strip.html>.