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INFORMATION LITERACY PROGRAMME IN THE FEDERAL UNIVERSITY OF TECHNOLOGY AKURE, NIGERIA: AN EVALUATION

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ABSTRACT

Evaluation of academic programmes is an important aspect of instructional design. This study assesses the perceptions of the students of the Federal University of Technology Akure, Nigeria on the availability of the factors that support effective implementation of GNS 103: Information Retrieval - the IL programme. The stratified random sampling technique was used to draw a sample of six hundred first year students of the 2012/2013 academic session, who were issued the questionnaire to test a number of factors required for effective implementation of the programme in the University. Descriptive statistics were used to analyse the data. The findings indicated that timing factors were good but that a separate hour for tutorials was required; course delivery received a generally approving pattern. Lecturers were regular (72%), punctual (66%), and proficient in their delivery of the course (53%). The content of the course was seen as good but weak in practical, library tour and ICT. IL enjoys support in terms of functional writing boards (62%), and neat learning environment but suffers: lack of public address system (81.6%), poor lighting (67.8%) and ventilation (61.9%) conditions, insufficient space for students (67.9%), no designated lecture room (66.3%) and no course book was available (70.0%). The University should upgrade the facilities used in running the programme. Also, those responsible for the academic content of the course should provide relevant course book and improve ICT component of the programme by providing computer (online) facilities to enhance practical knowledge. Lecturers of the course should be trained on pedagogy for effective delivery of learning.

Keywords: Information Literacy, Academic programme, Federal University of Technology, Akure

Introduction

Information literacy (IL) is referred to as Information Retrieval (GNS 103) in the Federal University of Technology, Akure, (FUTA) Nigeria and is run under the General Studies programme. It is a first year, single-credit load course run in the first semester. This course is undertaken by all regular students to acquaint them with the library, the available resources, how to access these resources and use them optimally. This course is taught in universities all over the world under one caption or the other. Some of the titles adopted in other

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universities for IL include library skills, use of library, bibliographic instruction, information competency and information literacy. Recently, IL is becoming the preferred term for such programmes (Hinchliffe & Woodward, 2001).

While the course content might also vary slightly from one place to the other, the bottom line is the expected outcome- which is to improve the students' skills as active users of information within and outside their immediate academic environment. The course is already established over the years, in not only the Federal University of Technology, Akure, (FUTA) Nigeria but also in many others, yet there are still some weak areas that need improvement in the conduct of the programme. Such areas include content, method of delivery as well as evaluation and assessment methods. Evaluation is a conventionally accepted step in any process or programme. Evaluation provides opportunities for improvement and consequently, better service. Therefore, this effort to evaluate the different aspects of GNS103 (Information Retrieval) programme is a necessary one.

Literature Review

Whether named information retrieval, bibliographic instruction, library skills or others, IL has expanded in scope beyond all of these nomenclature, the programme is the information skills programme organised for the library user by the library to enhance the users' ability to retrieve and use information with ease from available resources. As a concept, IL was first introduced in 1974 by a researcher, Paul Zurkowski (Eisenberg, Lowe & Spitzer, 2004). More recently, the tendency in professional circles is now to refer to this type of programme as IL (Milne & Lloyd, 2007 and Anunobi & Ukwuoma, 2016). The American Library Association (ALA) defines IL as a set of abilities requiring individuals to locate, evaluate and effectively use needed information. Maughan (2001) explains that the term information skills or library instruction involve a range of lower order competencies while IL combines lower order competencies with higher order abilities such as searching results for quality and relevance or evaluating the reliability, validity or authority of received of information. In other words, IL emphasises the "learning to learn", "independent learning" and "lifelong learning" concepts, and refers to a more comprehensive programme than previous designs.

Milne and Lloyd (2007) who note that the information society demands more astute users of information buttress this opinion. They emphasise the need for students to acquire higher level skills in information management to enable them succeed in a problem-solving environment and to compete successfully in the knowledge economy. The Academic and Research Libraries (ACRL) arm of the American Library Association endeavoured to standardise the IL programme and came out with the ACRL Information Literacy Competency Standards for Higher Education. Indeed, this paradigm shift to a more dynamic level of library users' education is itself suggestive of a need to evaluate traditional methods. Hepworth (1999) has also identified a wide range of skills beyond the basic skills of identifying useful resources to include brainstorming, concept mapping, presentation and communication skills and publishing techniques especially in electronic format like PDF. This author admits that these skills go beyond library skills, IT skills and should be a curriculum-wide initiative involving both the faculty and the library if it is to be effective.

Similarly, Wagner (2016) asserts that the global information economy now requires greater breadth and depth of skills in making meaning of present day realities, thereby requiring students to acquire survival skills such as critical thinking, problem solving, collaboration and leadership, effective communication (oral and written), accessing and analysing information effectively, curiosity and imagination. This highlights the importance of information literacy in the evolving world order. Information Literacy has been carried out over the years in various ways. Some of these methods include library tours, credit and non-credit courses, workshops, lectures and talks, computer assisted instructions, videotape guides and use of other support materials. Adebayo (2004) identifies others like one-to-one chat, library orientation and classroom instruction. The programme (IL) emphasises the librarians' role as an educator (Urhefe, 2014). However, the relevance of user education as is used in some quarters has

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been criticised in others. Bodi (1988) argues that teaching user education is unnecessary as it devalues the role of the librarian as a gatekeeper or mediator in the information scene. Thomsen (1999) argues that one of the oldest and most basic debates in librarianship is whether librarians should focus on service or education. Osborne (1989) also supports that opinion and adds that the instruction is neither holistic nor useful beyond the library, and is therefore unnecessary.

On the other hand, the University of Idaho website (2011) identifies one of the advantages of IL as the management of information explosion. Because of the "growing ocean of information" available in all formats, some of which are authoritative, current and reliable, while others are biased, out of date, misleading and false, it is very necessary to ensure that users are information literate. In addition, the methods and technologies used to access, manipulate, and create information keep expanding, making IL ever relevant. ALA identifies some reason for encouraging such programmes to include promotion of lifelong learning and controlling data smog that is, information explosion, students' performance and active citizenship. In addition, the management of user frustration stands out as a reason for continued teaching of IL. Bassey (2006) and Nwezeh (2010) in their studies of utilization of library resources indicate poor utilization and low awareness as ongoing concerns in academic libraries. The role of information skills in alleviating these problems is emphasised by Miller and Bratton (1988).

Evaluation of Library User Education and lately IL Programmes

Some studies already exist in the evaluation of user education programmes. Abiolu (2010), Osinulu (2003), Brush (2010), Hepworth (1999) and Ukoh (1988) have all conducted studies to evaluate library user education programmes in their respective institutions. The library has gone beyond user education to a higher level with wider user-oriented scope to IL. Educational evaluation is the process of characterising and assessing some aspect(s) of an educational process. Kizlik (2010) explains that evaluation is a process that is designed to provide information that will help make a judgment about a given situation. The situation could relate to objectives, goals, standards, procedures, and so on. Evaluation yields information regarding the worthiness, appropriateness, goodness, validity, legality and so on of something for which a reliable measurement or assessment has been made. Miller and Bratton (1988) identify evaluation as one of the five key elements of instructional design. The elements are the learner, the learning objectives, the subject content, the teaching methods, and the evaluation of the learning process.

The evaluation process involves the learners (what they knew, what they have learnt and the expected outcomes) and secondly, the programme (the methods, objectives, learning needs and the cost effectiveness of the programme). In fact, evaluation is perceived as a cyclical process. Maughan (2001) identifies the following as reasons for measuring IL competencies, to:

i. establish a baseline of skills around which an IL programme might be built, that is, benchmarking;
ii. assess the effectiveness of particular library instruction sessions or approaches to instruction;
iii. determine the impact of library instruction programmes on student information skills and academic success and to
iv. generate data with which to communicate with faculty.

Certain trends in IL practice and theory indicate the need for more evaluative research on IL as is being practised in the Federal University of Technology Akure, Nigeria. Webber and Johnston (2000) indicate that there are variations in conceptions about IL. Osborne (1998) reacts to the trend where bibliographic instruction is isolated from other instructional programmes in the faculty and decries the low level of representation of information technology literacy in the user education curriculum. In addition, Milne and Lloyd (2007) observe that students do not take the course seriously especially when it is not examined or seriously graded. They also identify other shortfalls such as the fact that the programme suffers from poor timing, thus making the student unable to appreciate the value of the programme, inability to align the

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programme with later research and project work, lack of confidence in the value of the programme by academic staff both for themselves and the students and the poor knowledge base of many librarians.

In another respect, Osinulu (2003) reporting on their own institutional kind of IL, reiterates that it is taught in Olabisi Onabanjo University, Ago Iwoye, Ogun State Nigeria in the General Studies Department without the input of librarians. The rigid method of providing the same library skills instruction to all first year students as if it is a rite, with emphasis on attendance has been criticised by Thomsen (1999). Anunobi and Ukwuoma (2016) note that the programme is differently captioned with varying contents therefore pointing to the need for evaluation and standardisation of practice.

Background Information on Information Retrieval (GNS 103) in FUTA

The course titled *Information Retrieval: GNS 103* is a foundation course treated as a compulsory general course and taught by professionally qualified librarians from the University Library. At the point of this research there are 11(eleven) academic librarians who split the 30 departments between them. The course is run as a single credit course with the library tour, test, assignment and examination as compulsory components of assessments. Until the 2007/2008 session, the course was a second semester course coded GNS 104. Due to considerations about timing and relevance to the needs of students, the change was effected. The change was accompanied by a major review of the content though not with the advantage of a critical review. New components such as ICT were introduced at this point to improve its relevance to contemporary situations. The Committee constituted to facilitate the review also endeavoured to streamline the course outline and make it more definitive. The goals identified for the course include to:

i. create awareness about available resources in all formats;
ii. equip students with skills to explore and exploit these resources; and
iii. enable student develop reading skills for functional and recreational purposes.

Objectives of Study

The objectives of the study are to:

1. investigate the suitability of the timing of the course with reference to the semester when it is taught;
2. determine if the time in terms of hours allotted to the course is sufficient;
3. assess student's perception of course delivery;
4. determine students' assessment of library tour; and
5. identify areas of deficiencies and proffer possible solutions for improvement.

Methodology

The study participants were six hundred first year (100 Level) students during the 2012/2013 academic session. They were drawn from ten departments of the six schools (faculties) that offer undergraduate programmes in the Federal University of Technology, Akure, Nigeria using a stratified random sampling technique. The survey instrument was a structured questionnaire titled "Feedback on GNS 103: Information Retrieval". It consists of five sections, A to E under the following headings: Background information; Timing factors; Lectures and course content; Facilities and Deficiencies. The questions consisted of open-and close-ended types, dichotomized "Yes or No" options and Likert scale types. The questionnaire was administered during class tests to ensure maximum return rate. Descriptive statistics were used for the analysis of the study.

Findings and Discussions

Out of 600 copies of the questionnaire distributed, 534 were found usable giving a return rate of 89% as shown in Table 1. Respondents from the School of Science (29.77%) formed the majority followed by those from the School of Engineering and Engineering Technology (23.22%) while those from the School of Agriculture and Agricultural Technology (1.68%) responded least.

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Table 1: Distribution of the Respondents by Schools

School	Frequency	Percentage
School of Sciences	159	29.77
School of Engineering and Engineering Technology	124	23.22
School of Earth and Mineral Sciences	110	20.59
School of Environmental Technology	84	15.73
School of Agriculture and Agricultural Technology	09	1.68
School of Management Technology	51	9.55
Total	**534**	**100**

The mean age of the respondents was 20.4 years. Response to their educational background shows that 88.3% had senior secondary school education. Only 77.1% of the respondents were registered users of the University Library. Majority (88%) had previous library experience. The details of the various type of library students had used before the University Library is as follows: school library (65.4%), public library (18.4%), academic library (12.3%) and national library (3.9%).

Students' perception of timing factors, quality of teaching and course content

The adequacy of some parameters with respect to Information Retrieval was tested. These include timing factors, course content, course delivery, availability of facilities that support the delivery of the course and deficiencies that jeopardize the thorough delivery of the course if any.

Timing factors of GNS 103

Students were asked to respond to the question of whether or not the time allotted for the course was enough. Responses by 87.5% show that the time allotted for the course was enough. Further questions were asked with respect to students' desire for tutorials. About 59% wanted separate hour for tutorials as this was absent from the course structure since it is a one-unit course. On the question of a more suitable semester to hold the course, 89.6% agreed to the first semester as being suitable. This agrees with the current period during which the course is taught in FUTA. Another question was asked on whether the course should be run for another semester before graduation, 66.9% wanted the course to be run for one more semester before graduating from the University. Overall, the findings on the timing factors lend credence Milne and Lloyd's (2007) observations that timing factors are important considerations in the effective implementation of user IL programme. Here, respondents noted the timing factors for this course at the Federal University of Technology were good.

Course content and delivery

The students' distribution on this is as displayed in Table 2.

Table 2: Students' Distribution on the various Aspects of the Lectures Received on the Course

Course	Responses (%)				
	Excellent	**Good**	**Fair**	**Poor**	**Don't know**
Content					
Relevance to my studies	43.8	40.0	7.6	2.2	6.4
Importance to academic living	63.4	28.3	4.1	0.2	4.0
Supporting life-long learning	57.0	34.1	3.4	0.2	5.4
Boosting of individual learning	64.1	30.7	2.0	0.0	3.2
Simplicity of the course to students	9.3	47.5	27.7	9.5	6.0
Support giving more assignment to students to enable them practice what they are taught	25.1	41.7	19.9	8.6	4.7

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University Library has adequate materials to support the course	49.3	31.8	12.8	2.0	4.0
The course gives a better understanding of the library, information and how to obtain information from the library	70.6	21.8	3.7	0.9	3.0
Delivery					
The course was well explained	46.6	17.5	17.7	7.1	11.1
The lecturer was always regular	71.7	18.6	6.9	0.9	2.6
The lecturer was always punctual	65.7	23.8	5.8	0.9	4.3
Assessment of the library tour and practical	45.8	41.3	10.4	0.6	1.3
ICT practical content of the course	2.2	6.5	30.5	52.9	7.9
General assessment of the course	45.8	46.6	5.2	0.6	1.9

In terms of content, 70.6% rated very highly the role of the course in making them understand the library and information world. Sixty-four per cent of the respondents rated excellently the value of the course to academic success; about 63% of the students agree that the course has played an excellent role in individual learning. However, the simplicity of the course rated lowest (9%) in their perception. The general perception of the course is good in many respects. In a study of the trends and challenges of teaching IL in Nigeria, Anunobi and Ukwuoma (2016) reported that most of the universities in their study had not consolidated the library literacy programme, creating a situation where the content was not adequately in sync with the global principles or trends of information literacy. The perception of the students about the course delivery reveals a similar pattern of a generally approving opinion.

However, areas of course delivery ranked excellent include regularity of the lecturers (72%), punctuality (66%) and proficiency in explaining the course (47%), library tour and practical classes (45.8%) while 52.9% of the respondents indicated that the ICT component of the course was poor. This finding is in harmony of Abiolu (2010) who found that the course delivery was weak in the area of ICT and practical for a study conducted among the non-fresh undergraduates. A general assessment of the effectiveness of the course indicates that 46% rated the course as excellent while 47% rated the course as good. That IL skill is well-defined in the curriculum the University is in consonance with Eisenberg *et al* (2004) as these authors stress the need for its integration within the curriculum.

Availability of Facilities

Questions were asked also on the adequacy of the facilities of the facilities that support the Course. Responses are displayed in Table 3.

Table 3: Students Distribution on facilities available for the course

Facilities		**Responses (%)**	
		Yes	**No**
i.	Lecture rooms are large enough to contain students	31.3	67.9
ii.	Lecture rooms are well lit	32.0	67.8
iii.	Lecture rooms are well ventilated	39.1	61.9
iv.	Writing boards for lecturers are available	61.8	39.2
v.	Writing boards are in good condition	40.6	59.4
vi.	Lecture rooms are always kept clean and tidy	61.5	39.5
vii.	There is the need for public address system in lecture rooms	81.6	18.4
viii.	There is assigned room available for the course	33.7	66.3
ix.	Course book is available	30.0	70.0

The facilities that received the highest rating in terms of availability are writing boards (62%), good condition of writing boards (41%). A majority (62%) of respondents found the lecture rooms tidy. However some of the facilities were rated inadequate such as public address systems (81.6%); poor lighting (67.8%) and ventilation (61.9%) of the lecture rooms. Another parameter that was perceived as inadequate is the size of lecture rooms (67.9%) in comparison to the population of students. An important thing that calls for concern is the fact that there are no assigned lecture rooms (66.3%) for the delivery of

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the course. However, about 70% of the respondents noted that course book for the course was not available. The students' assessment of the availability of facilities for the course was generally poor. IL should enjoy support from within and without the educational institution to be successful (Eisenberg *et al*, 2004).

Deficiencies to the course

Students were given a list of some deficiencies from which they were to select those they thought constituted major problems to the teaching and learning of Information Retrieval. The students' responses are displayed in Table 4.

Table 4: Distribution of Responses to deficiencies to the course

Facilities	Responses (%)
i. Unavailability of public address system	68.7
ii. Inadequate space for students	67.3
iii. Course book is unavailable	65.9
iv. Too many students per class	60.0
v. Inadequate practical	35.9
vi. Poor use of ICT for teaching	34.6
vii. Limited library resources	25.3
viii. Guide posts are inadequate to show where the resources are kept in the library	25.0
ix. Wrong time allotment for lecture	22.5
x. Inadequate example	22.0
xi. Teaching/lecturing methods	19.4
xii. Short time duration of the course	14.9

Table 4 shows in ranked order the deficiencies the students observed in the course presentation. Ranking highest were unavailability of public address system (69%), inadequate space for students (67.3%), and unavailability of course book (65.9%), too many students per class (60.0%), while duration of course (15%) ranked least as a deficiency. Absence of course book is not in disharmony with Maitaouthong, Tuamsuk and Tachamanee (2012) who found that university libraries are the important organisations to teach and support the integration of IL in the instruction of the many courses with respect to learning resources as well as sources. The finding on the duration of the course is not surprising as earlier on noted under timing factors where the result supports that of Milne and Lloyd (2007) that good timing factors contribute positively to IL.

Conclusion and Recommendations

The study found that timing factors for the course were good except that most of them wanted the course to extend for one semester before graduating from the University. With regards to the content, respondents found it to be adequate except in the area of ICT. The delivery of the course by participating lecturers was seen as fairly good by the respondents. However, facilities supporting the adequate teaching and learning processes involved in IL was poor. In view of the changes in the methods and needs of contemporary information seekers there is need to evaluate current practices in order to improve course delivery, pedagogy, content and outcomes. In the light of the findings, the following recommendations are suggested for improving IL tagged *GNS 103 Information Retrieval* in the Federal University of Technology:

1. improvement in facilities especially lecture space, its lighting and ventilation, and provision of public address system;

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2. development of the ICT component in Information Retrieval to align it with present realities in learning environments;
3. provision of a well-developed course book to aid teaching and learning;
4. widening of the curriculum to accommodate all aspects of IL as accepted in similar institutions in other environments and to meet the international standards of the IL programme;
5. standardisation of the library/ IL curriculum in Nigerian universities under the supervisory effort of the Nigerian Universities Commission as is done for other courses;
6. in line with international practices, aspects of IL should be, incorporated into the curriculum on a university wide basis by integrating aspects of it into every course;
7. lecturers need to be trained on pedagogy and;
8. faculty should be encouraged to fashion assignments that build IL skills. There is a tendency for lecturers to provide all the resources required by the students rather than encouraging students to explore the knowledge base of the subject independently. The importance of IL within the context of problem-based learning should be emphasised in the entire university curriculum.

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