

Teaching of Information Literacy as a Credit-Bearing Course at Two Ghanaian Universities: a Comparative Study

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Abstract

This study compares delivery of information literacy in two Ghanaian universities by looking at the characteristics, similarities and differences between them. It is concluded that the contents of the two courses did not conform to any of the information literacy standards. Suggestions are made for further studies.

Keywords: Information literacy; University libraries; Ghana

Introduction

The advent of the Internet and the World Wide Web has worsened the information overload the world was already experiencing. The Google search engine alone indexes one trillion websites as in July 2009 which represents a dramatic increase from two billion that Cunningham and Lanning (2002) stated they recorded in June 2000. The proliferation of information has also raised issue of the quality of information people churn out on the Internet, because websites do not undergo as rigorous an editing as is associated with information published in print. Any person could put up anything on the Internet irrespective of the quality.

In order to have credible information, it is essential that students develop the ability to locate effectively, evaluate critically, and incorporate information into their knowledge frameworks. The need for students to have the requisite skills to make effective use of information gave birth to information literacy which Goulding (2001, p.110) contends "is often prescribed as the main antidote to information overload." The development of information literacy skills is gaining roots throughout the world although there is a lack of uniformity in the development (Lau, 2007). This lack of uniformity is more pronounced in English speaking sub-Saharan Africa where, as Fidzani (cited in Lau 2007) intimates, information literacy could be taught as a credit-bearing course as

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components of communication, and computer literacy courses or as user education or in partnership with faculty offered as an integral part of some core courses. In South Africa, however, information literacy is delivered as mostly as a generic subject in several institutions Jager, Nassimbeni & Underwood (cited in Lau, 2007)

Zurkowski (1974) coined the phrase of information literacy when he stated:

People trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for utilizing the wide range of information tools as well as primary sources in moulding information solutions to their problems. (p.6)

Information literacy has subsequently been defined variously by different authors such as Doyle (1994), Shapiro and Hughes (1996), Bruce (1997), Johnston and Webber (2003), and Library and Information Professional Associations such as the Chartered Institute of Library and Information Professionals (2004). However, the definition given by the American Library Association (1989, para 3) has most often been used, "To be information literate, a person must be able to recognise when information is needed and have the ability to locate, evaluate, and use effectively the needed information." This definition has often been captured in some other definitions as in Plotnick (1999) and ACRL (2000).

Salony (1995), Hernon (1982) and Seamans (2001) have all successfully traced the origin of the teaching of information literacy to bibliographic instruction which Seamans (2001) dates to be over 150 years old. Bibliographic instruction could, therefore, be said to be the springboard for the emergence of information literacy instruction as a credit bearing course. In Ghana there is no government policy on information literacy but rather it is information and communication technology (ICT) that is explicitly captured in its policy on education just like the United Kingdom (Webber & Johnston, 2003a). Universities, therefore, elect to offer the course on their own accreditation in the absence of accreditation requirement.

This study aims at making a comparison of the teaching of information literacy in two Ghanaian Universities (will remain

anonymous) and make suggestions for the path forward based on the findings. The study would specifically identify and critique the characteristics, similarities in the credit-bearing information literacy courses of the two universities by looking at whether the current practices in the two universities are able to teach us about the path forward in the development of information literacy instruction as credit.

Issues Surrounding the Teaching of Information Literacy

The teaching of information literacy has often been characterised with discussions that relate to the involvement of librarians as teachers, curriculum and assessment and evaluation of the course.

The involvement of librarians in teaching information literacy courses has ignited a heated debate that is well rehearsed in the literature. The debate seeks to question the competence of the librarian as a teacher, developer of the curriculum, and assessor of students. Justin Windsor, the first president of ALA, (cited in Salony, 1995) shares the thought that the librarian is an educator and has a vital role to play in making it possible for students to use the resources of the library. Windsor calls for librarians to work together with the faculty by providing services to meet their needs and tastes when necessary. Arguments, however, have been raised that strongly seek to question the propriety of librarians teaching students, including Foster (1993) and McCrank and Boyce (cited in McGuinness, 2003).

Smith (1997) admits that librarians could teach but asks that librarians should rather teach the faculty instead of students so that the faculty in turn teach students. Godwin (2005), however, suggests that faculty members do not have interest in information literacy and even resist it. Webber and Johnston (2000) and Orr and Cribb (2003) express concern over the low premium that faculty and students would place on the course if it were seen that librarians are primarily responsible for it. Orr and Cribb (2003, p. 48) put it succinctly thus, "As long as the delivery of information literacy remains primarily in the hands of librarians, students continue to perceive information literacy as an 'add-on' rather than an important aspect of their learning."

Librarians are seen to be ill-prepared for the task of teaching students. Doskatsch (2003), Biddiscombe (2000) and Jackson (2000), therefore, suggest that librarians would have to acquire teaching skills

so that they were able to play that role effectively. To enable librarians to acquire teaching and assessment skills, Meulemans and Brown (2003) suggest that LIS schools should dovetail education into their curriculum so that librarians could be trained to teach as well.

It is my view firstly; however, that students of LIS schools ought to become librarians before deciding to be teachers, for it is not every student of LIS that would like to be a teacher. Secondly, LIS programs are normally heavily loaded in terms of the credit hours they carry, whether the programs are run over one or two years. To add teaching, which would normally add one year to the LIS program, could lead to LIS students not having a full mastery of librarianship itself. LIS students must, therefore, become librarians before deciding to become teachers. Thirdly, it is not all librarians who would like to teach information literacy; those who would like to teach can pursue a one-year post graduate program in education after graduation.

Webber and Johnston (2006) discuss quite a number of information literacy standards in the world. Hepworth (2000) is of the opinion that the teaching of information literacy is best enhanced when it is integrated into the curriculum of another discipline. Johnston and Webber (2003b), however, contest this assertion and catalog a number of problems inherent in the practice. Badke (2007) intimates that the teaching of information literacy becomes effective when it is taught as a distinct course within a major discipline but when it is fully embedded in a discipline it becomes difficult to use.

Windsor's advice (as cited in Salony, 1995) that librarians should foster partnership with the faculty to provide better library services to students appears to lay the foundation for cooperation between the two and is shared by some authors like Lannuzzi (1998). Bruce (2001) identifies five critical areas for librarians and academics to work together in providing educational services to students:

- policy partnership;
- research partnerships;
- curriculum partnerships;
- higher degree supervision; and
- academic development partnerships.

The partnership between librarians and academics that can be fostered in the areas suggested by Bruce (2001) appears to have been undermined by unsavoury views (as cited in Doskatsch 2003) that academics hold of librarians, according to research conducted in USA and Canada in the 1980s and 1990s. Flaspohler (2003), however, alludes to several instances where librarians and faculty have successfully worked together to offer information literacy. Hardesty (1995) intimates that if faculty are not involved in teaching students how to use the library, it would have negative effects on the program.

Race (cited in Walton, 2005) mentions that assessment is crucial in learning, because it makes students learn. McNamara (cited in Walton, 2005) also argues that assessment of information literacy programs breeds feedback and indicates progress or otherwise of the student. Walton (2005) suggests that assessment makes the students show that they have indeed achieved the stated objectives of the lesson. Evaluation of courses, diagnosis, and summative assessment were focused in the literature to some extent, but according to Walsh (2009) the reliability and the validity of assessment tools were most often ignored except in a few cases.

The diagnosis of students' information literacy skills could comprise pre-class and post-class tests administered at the beginning and the end of the semester, with the results compared as seen in the works of MacDonald, Rathemacher and Burkhardt (2000); Fiegen, Cherry and Watson (2002) and Colborn and Cordell (1999). Questionnaires and multiple choice test items are commonly used as the major assessment tool to find out the student's grasp of information literacy skills, as seen in the works of Crib and Woodwall (1997), Andretta (2001) and as identified by Caravello, Herdsman and Mitchell (2000) and Walsh (2009). Webber and Johnston (2003b) further identify short tests, bibliographies, worksheets and online workbooks/ tutorials as other methods of assessment. Webber (2001) faults multiple choice tests on the grounds that they permit students to do guesswork. Webber's (2001) concern, however, appears to have been addressed by Williams (2000) who called for types of assessment that should have good qualities of multiple choice tests. A well designed multiple choice test makes it quite difficult if not altogether difficult for students to guess correct answers.

Questionnaire

The questionnaire was made up of 30 items comprising both close and open ended questions. The questionnaire was partly developed from the work of Miller (2004). In response to Bell's (1999, p. 128) advice that "however, pressed for time you are, do your best to give the questionnaire a trial run, even if you have to press-gang members of your family or friends" the questionnaire was pilot tested in one library before it was administered. Comments received from the pilot test enabled me to fine tune the questionnaire to enable respondents to have little or no problem providing responses to its questions. The pilot test also helped to minimize problems of recording the data. Furthermore, it gave me an opportunity to assess the validity of the questions and the possible reliability of the data that were collected.

Sample

Anecdotal evidence suggested that the two universities were the only fully fledged universities in Ghana that offered credit-bearing course in information literacy. A questionnaire was prepared and sent to the university librarians to provide responses. One responded immediately but it took quite a time for the other to respond and when the response finally came telephone calls had to be made to clarify some responses and to complete some items that were unanswered.

Data Analysis

The data were analyzed into patterns, categories and basic descriptive units as suggested by Patton (1987). The quantitative data collected from the questionnaire was descriptively analyzed. Information obtained from the open-ended items on the questionnaire was summarized in qualitative form using themes that matter to the research.

Discussion of Findings

Question one asked respondents to state the name they had given to the credit-bearing course in information literacy. The two libraries had the same name for the course, namely "Information Retrieval." The choice of name could not be by sheer coincidence, for there is anecdotal evidence that one of the two librarians had worked in

the other university library and is credited with the introduction of the course in their university. It is likely, therefore, that the university librarian just adopted the name given to the course at their previous university. The name for the course, Information Retrieval, however, depicts restriction of information literacy skills to only access which is not the case. A more inclusive name like Information Skills could have been apt.

Question two asked respondents to state how long they have been offering the credit-bearing course in information literacy. Library "A" had offered the course between five and six years whilst "B" had offered it over ten years. This shows that the two university libraries have been involved in offering this course for quite a considerable number of years. This contrasts favorably with the trend in the United Kingdom (Buer, 2005) where a majority of the universities offering a credit course had done so for not more than two years.

Question three would like respondents to state the faculties or departments that offer the module. Library "A" indicated that the course was offered to all students in the university. This has the potential of making every graduate of the university become information literate. This, however, contrasts sharply with the trends in the United Kingdom where it was offered only to some faculties or departments (Buer, 2005). The library "B", however, indicated that the course was offered only by the Department of African and General Studies. The choice of the Department of African and General Studies could be explained by the fact that there is a large volume of literature in those disciplines. Students, therefore, ought to be equipped with the necessary skills to be able to make intelligent use of the information in those disciplines. It is, however, difficult to explain why other departments like sciences, which need current information, were not involved.

Question four sought to find out who had the responsibility to determine when the course would be offered. "A" indicated that it was the library that determined when the course was offered. "B" on the other hand, said it was the school or the department in which the course was offered that determined when the course was offered. "B" thus had shown involvement of the school or department in the running of the program in regard to the determination of when the course was run, whilst "A" did not. It would be interesting to find out how this could possibly place limitations on the value of the course for "A" as Hardesty (1995) suggests. "B" has, therefore, shown a little cooperation with the

faculty as advised by Justin Windsor, the first president of ALA (cited in Salony, 1995).

Question five asked respondents to state the level at which the module was taken. Both libraries, "A" and "B", mentioned that the course was offered at the first year, as has been the case for the majority of universities in the United Kingdom (Buer, 2005). Taking the course in the first year enables students to make full use of the skills they acquire throughout their studies and maximize retention in the following years. Boff and Johnson (2002) identify first year as the best year for teaching information literacy concepts. On the other hand, it can be said that taking the course after the first year also has the advantage of motivating students to be serious with the course. This is because the need for such skills will be created in them during the first year of their studies when they are most likely to exhibit a lack of information literacy skills.

Question six asked respondents to state learning outcomes of the module. Respondent "A" stated these outcomes:

- To get students to appreciate the role of the library in the academic community - how the library supports teaching, learning, research and extension activities in the university.
- To teach students, who lack basic knowledge of computers, to understand the essentials of computer.
- To make students aware of the resources and search tools of the library (the traditional and digital) and teach them how to use these.
- To teach students how to access, retrieve and evaluate information from the Internet for their academic work, later working life, and personal development.
- To equip students with skills that will enable them manage and use online journals and other electronic resources.

Respondent "B" stated these outcomes:

- To be better users of information centers.
- To prepare and cite references accurately.

It could be seen from the stated learning objectives that the library "B" had identified more easily assessed performance areas, thus making it easier to assess the impact of the course.

Question seven elicited from respondents topics they treat in their modules. The following were the responses obtained from both respondents:

Respondent "A"

- Types of libraries
- Library resources and their uses
- The role the library plays in the academic community
- The Internet - What is its origin, services. Internet browsers: Internet Explorer, Netscape Communicator and OPERA
- Internet search tools - web search tools: search engines, meta search engines, subject directories, directory services, information gateways, specialized databases.
- Bibliographic and full-text online databases, online collections of papers, current awareness and alerting services, online reference books, publishers' lists, electronic journals and table of contents, data archives and statistical packages.
- Mailing lists
- The Internet Detective - how to evaluate information on the web.
- Copyright issues
- The electronic library and information resources; types of electronic journals; types of scholarly databases; why use databases; accessing scholarly databases; electronic resources available through the Programme for the Enhancement of Research Information (PERI) project; effective search strategies and techniques; archiving electronic journals; and legal issues associated with electronic resource access and usage.

Respondent "B"

- Libraries; information and the society; types of libraries; book and non book materials
- Methods of acquiring library materials
- Information organization: cataloging and classification
- Information retrieval: importance of catalogs, indexes and abstracts
- Using library resources: circulation, reservation, reserved system, reference
- Types and uses of reference materials
- Copyright
- Information resources, information systems and automation

- Research methods: literature searches, bibliographic citations and report writing
- The Internet: what is the Internet? available resources on the Net, importance of the Internet.
- Electronic: online resources, CD ROM databases.

The topics covered by the two libraries did not appear to significantly follow any of the well known information literacy standards in the world; they appeared to be 'fitness for purpose.' Evaluation of information is very important aspect of information literacy and it is indeed a core element in the information literacy but this was completely missing in the topics offered by library "B" and was partly catered for by "A" with the evaluation of information from the web whilst print sources were left out. The inclusion of Netscape Communicator as a browser in the topics taught by "A" is anachronistic just as the non-inclusion of new relatively browsers like Firefox.

Some of the topics covered such as types of libraries, the role the library plays in an academic community, importance of catalogs (not how to use them), methods of acquiring library materials, information systems and automation, and information and society seem to suggest that their learners were being prepared, in part, for the library profession rather than equipping them with lifelong learning skills.

The seeming deficiencies in the curriculum of the two courses could be ascribed to the absence of any governmental policy on information literacy that could act as a framework for the development of information literacy to evolve around. The government of Ghana, like that of the United Kingdom (Webber & Johnston, 2003b), has no policy on information literacy in education. Information and communication technology (ICT) is, however, explicitly captured in its educational policy making its teaching and learning become compulsory subject in its pre-tertiary educational institutions.

The eighth question sought to know from respondents if the module was offered as a standalone or in conjunction with other departments. Library "A" offered the course as a stand alone whilst "B" offered it in conjunction with another department but it was taught as a separate course within the department. The responses seem to follow the trend in the United Kingdom where the stand alone is popular (Buer, 2005) and a departure from the suggestion by Hepworth (2000) that the

integration of information literacy into the curriculum is popular in the United States, Canada, Australia, the Scandinavia, the Netherlands, and New Zealand.

The ninth question asked respondents to state the duration of the course in terms of contact hours per week and the number of weeks it is taught. Both libraries, "A" and "B," indicated they offered the course for one hour a week for 12 weeks.

The tenth question asked respondents to state the credit value of the module. Library "A" responded that it offered credit value of one to the course whilst library "B" mentioned it offered credit value of two.

The eleventh question asked respondents to state whether the module was a core or elective. Both libraries indicated they offered the course as a core module. The choice of core as against elective could be borne out of the conviction that the course was a valuable one which would help the students in lifelong education and so every student should pursue it. It could also be argued that the two libraries might have foreseen some students not taking it if it were to be an elective. Buer (2005) anticipates such modules becoming core in future as universities become more convinced of the importance of information literacy skills or out of the need to make their products competitive in the world of work or to meet the demands of industry which are likely to arise in future.

The twelfth question asked to indicate whose duty it was to select the teachers of the course. Both university libraries affirmed that it was the University Librarian of their institutions who selected teachers for the course. The selection of teachers for the course did not, however, show any element of partnership between librarians and the faculty as Bruce (2001) advocates in the area of academic development and as Hardesty (1995) suggests helps ensuring success of the course.

The thirteenth question asked whose duty it was to coordinate the instructors. Respondent "A" declared that it was the Course Coordinator who was responsible for coordinating the instructors. Respondent "B", however, asserted it was the duty of the head of the Department of African & General Studies. "B" in this respect, had involved the faculty in the program as suggested by Justin Windsor, the first president of ALA (cited in Salony, 1995), Bruce (2001) and Hardesty (1995).

The fourteenth question asked respondents whose duty it was to select textbooks/ readings for the course. Whilst respondent "A" pointed out that the selection of readings was done by all the four librarians who taught the course, respondent "B" said it was the university librarian who did the selection. Thus the reading list selection process of library "A" was more inclusive than that of library "B" as it involved all the four librarians who were involved in the teaching whilst library "B" ones were selected solely by the university librarian. It must be noted that the selection of the reading list at library "A" excluded faculty.

The fifteenth question asked respondents to state how they acquired the knowledge and skills to administer a credit course. They were to tick as many as applicable from a set of responses given to them. Respondent "B" said they learned to administer the course through a workshop for faculty/ staff by their institution. This represents the use of informal means to impart skills to the administrators of the course. Respondent "A" provided no categorical answer, crying lack of understanding of the question, but did suggest though that, "There may be the need to train those who deliver the course." It could be inferred from the suggestion from "A" that those who administered the course were probably not given any training to do so. If this inference is correct, then it makes meaningful the call by Boden and Halloway (2005), Biddiscombe (2000) and Jackson (2000) for librarians to acquire teaching and assessment skills.

The sixteenth question would like to know from respondents how they learned about policy and procedure changes regarding credit course at their institutions. Respondents were to state as many responses as applicable from a given number of possible responses given. Respondent "B" revealed a multi-disciplinary approach involving the use of handbook revisions, memos, informal discussion with those who administer the credit courses, professional literature, and meetings specifically at their Faculty and Academic Board Meetings to learn about policy, procedure and changes pertaining to the course in their institution. Respondent "A", however, did not provide any response.

Question seventeen would like respondents to state what in their opinion would have made it easier for them to administer the credit course. Respondent "A" said they did not know of any means that could make administration of the course easier than they had it. "B", however,

recommended periodic evaluation of the course and training workshops for the librarians involved in teaching the course with the view to improving the administration of the course.

The eighteenth question asked respondents who was involved in the development of the module from the standpoints of developing the course, teaching, and marking it. Respondent "A" provided no response to the question. Respondent "B" pointed out that it was librarians alone who were involved in the development of the module by way of developing, and teaching the course as well as marking the examination scripts of the students, to the total exclusion of the faculty. It could be observed, therefore, that Justin Windsor's advice (cited in Salony, 1995) to librarians to work together with the faculty by providing services to meet their needs and tastes of their students was not taken. Similarly, Hardesty's (1995) assertion that librarians will achieve little in their efforts to educate students in library use without the involvement of the faculty was also not considered.

The nineteenth question requested respondents to state how the course was assessed by providing a checklist of main types of assignment or refer the researcher to a relevant web page. Respondent "B" said the course was assessed through assignments, hands-on, and examinations. Respondent "A" however did not respond. The types of assessment given support the findings of Webber and Johnston (2003a), and Caravello et al. (2000) regarding the frequency of their usage in information literacy assessments.

Respondents were asked to state the percentage mark associated with the information literacy element in the credit-bearing course in question twenty. Respondent "A" indicated that a 100% mark was explicitly associated with the information literacy element in the credit-bearing course. Respondent "B", however, associated a 25% mark with the course. Respondent "A"'s 100% mark was because it was offered as a Stand Alone course independent of a faculty or department. Conversely, respondent "B"'s 25% could be borne out of the fact that it was integrated into the African and General Studies curriculum and other module(s) possibly account for the remaining 75%.

Question twenty-one asked respondents to state how the module was graded. Both "A" and "B" employed the use of letter grades - A, B, C, D, E and F to grade students. This conforms to the grading systems in

their universities.

In question twenty-two respondents were asked to state the bases for grading students in the module. Respondent "A" intimated that student grading was based solely on the final examination whilst respondent "B" graded through homework, practical and a final examination. It could be seen that whilst respondent "A" used only one means to grade students, respondent "B" used three means to do so. The large number of students pursuing the course in "A" could possibly explain the use of only one method of assessment. It is worth noting the non-use of other bases of grading students like class attendance, class participation, final project, electronic portfolio and coursework, that were used in some universities in the United Kingdom that teach information literacy (Buer, 2005).

Question twenty-three would like to know from respondents how the grading scheme was determined. Respondent "A" pointed out that it was the university librarian who determined the grading scheme whilst respondent "B" said it was the Academic Board of the university.

Question twenty-four asked respondents to state who determined the overall grades of their students. Respondent "A" said the overall grades of the students were determined by librarians teaching the course. Respondent "B" also said it was the teaching librarians but added that this was done with the approval of the Faculty and Academic Boards of the university.

Question twenty-five asked respondents to tell how they learned to grade students. Library "B" intimated that they learned how to grade through mentoring within the university but "A" provided no response.

Question twenty-six asked the respondents to state what in their opinion could have made it easier for them to learn how to grade students' performance. Respondent "A" indicated their inability to respond to the question, but respondent "B" mentioned experience and external examiner's reports as two factors that could make them gain mastery of grading students' performance.

Question twenty-seven asked respondents to say who evaluated their modules, and were asked to choose their responses, as many as applicable from a given number of responses. Respondent "A" stated that the evaluation of the course was done by the Academic Planning

Committee of its university. Respondent "B", however, said it was the instructors who evaluated the course. It is worth to note also the non-involvement of students in the evaluation of the course.

Question twenty-eight asked respondents how often the course was evaluated. "A" discloses that the course is evaluated every five years. "B" on the other hand states that the course has been evaluated only once over the 10 years that it has been delivered.

Question twenty-nine asked respondents if there was feedback from the module's assessment. Both libraries indicated the use of summative assessment, i.e. the employment of marks or grades. Both, however, showed non-use of formative assessment to give advice on students' strengths and weaknesses in the course. This represents a limitation in both courses because it would have enabled students to benefit much from such an assessment. The large number of students involved could explain this.

Question thirty asked respondents to state if there was summative or formative feedback given for exercises which were not part of the assessment. They were to state Yes, if they did, and No, if they did not. Both libraries indicated they never had any feedback from the summative or formative exercises which were not part of the assessment.

Conclusions

This study had the goal of making a comparative study of the two anonymous universities in Ghana teaching information literacy as a credit-bearing course. The objectives of the research and the research question were also stated. It is against this background that the conclusions and recommendations of the work would be drawn by summing up the major highlights of the study.

To my mind, the issue of involvement of librarians as teachers in information literacy courses has been over-flogged. Librarians are certainly not the only professionals without training in teaching who teach in the university. There is anecdotal evidence of some librarians who are appointed from the library to take full time appointments in information and library schools without having any teaching experience or any training in teaching. Similarly, there are not other professionals, like

engineers, medical practitioners, and accountants, who take teaching appointments in higher education without having any training in teaching, nor do they have any experience. It could be said, however, that once these professionals are appointed, they are made to undergo training in teaching. The same provision could be made for librarians who are teaching information literacy.

The issue of limitation of sphere of influence of librarians in academic affairs raised by Webber and Johnston (2003a) and Orr and Cribb (2003) could be removed if the universities confer academic status on librarians with the requisite professional qualifications which will empower them to teach. To my mind, librarians who teach need not have the same qualification as such academics as MaCauley (cited in Doskatsch, 2003) think, although it is desirable if they do. They must be assessed for teaching based on their professional qualification, experience, ability and interest to teach. If the credit value of the course is comparable with others and the contents of the course are made to be relevant to students' life in school and after school, and if librarians as teachers are able to show mastery of the subject matter, students will not only be highly motivated to pursue the course but will also place a high premium on it.

What needs to be done is to teach librarians through workshops the basics of teaching and how to set and mark examination questions based on their course. They must be taught as well how to analyse the scores of students. Alternatively, librarians identified to teach can be asked to take a one-year postgraduate certificate in education before teaching.

There is no way the teaching of information literacy can be effective if it is given to the faculty alone to teach as Smith (1997) suggests, because the faculty may not be able to show more mastery of the subject matter than librarians. This suggestion from Smith (1997) raises the question that if librarians are qualified to teach faculty information literacy, then what prevents them from teaching students directly? The teaching of information literacy by librarians is borne out of mastery of content of the subject matter and working experience as librarians (who come into close contact with students in the course of their use of the library). Faculty would not have this kind of experience. Besides the faculty have their own subject discipline and very few would like to venture into an apparently new subject discipline of information

literacy to either total or partial neglect of their own which they could be emotionally attached to.

One needs to be information literate before one teaches information literacy. Whilst it can be said that librarians are information literate, by virtue of their professional training, the same cannot be said of faculty, at least in our part of the world. Librarians must therefore continue to teach information literacy with the active involvement of the faculty as partners.

Report on partnership between librarians and academics was also identified in the literature. Success stories have been identified in some universities and problems identified as well. Essential areas of cooperation between librarians and academics to make the course in information literacy successful were also suggested in the literature. Successful partnership will basically depend on these two groups of people identifying themselves as employees of the same university, and as equal partners with a common goal of helping their respective universities to produce graduates who can compete favourably in the international job market.

The issue of whether information literacy courses should be as stand alone or integrated into the curriculum was also identified in the literature. Each side has justifications to support its stand but it is my thinking that, as the teaching information literacy as a course develops or as more and more student are made to take it as a core module, it will become a distinct discipline on its own just like any other subject and will be offered as stand alone.

Reports on assessments of students in information literacy were found in the literature. Various modes were used in assessing and grading students. As such courses appear to be in their formative years, with the passage of time the modes of assessing and grading students may be fine tuned to address any inadequacy identified.

Discussion of the data collected shows that considerable similarities and differences exist in the administration of the credit-bearing courses in the two universities. The differences could largely be due to the absence of information literacy standards in the country that would guide them to narrow their differences particularly as regards the curriculum.

There were similarities and differences also at the level that the course was taken. Both of them offered the course in the first year. It is my opinion that if the first year is used to create the awareness in the students where there is anecdotal evidence that they normally lack information literacy skills, they will take the course very seriously in the second year when it is introduced to them; they will see it as a course designed to address their lack of information literacy skills.

The development of course modules showed a display of somewhat minimal collaboration between librarians and academics in one course while in the other a partnership was completely absent. Both courses used summative assessments to get feedback from the modules assessment. The courses were all periodically evaluated but students' involvement in the evaluation was totally absent.

From the findings the librarian of Library "A" seemed to be the person who influenced what should be done and how, as against Library "B" where there appeared to be involvement of some stakeholders of the teaching of information literacy in the decision making processes. Thus, there seemed to be "central" and "distributed" forms of control over the teaching of the course in the two institutions. It would be interesting to investigate if the different forms of control are products of policy decisions of the institutions, personal preferences and the like especially with regard to Library "A". There is the need to investigate whether this apparent central control and distributed forms of control over issues pertaining to the teaching of information literacy were borne out of a policy decision of the institutions, personal preference or any other.

References

- American Library Association, Presidential Committee on Information Literacy. (1989). *Final report*. Chicago, IL: ALA.
- Andretta, S. (2001). Legal information literacy: A pilot study. *New World Library*, 102(7/8), 255-264.
- Association of College and Research Libraries. (2000). *Information literacy competency standards for higher education*. Chicago: American Library Association. Retrieved from <http://www.ala.org/ala/acrl/acrlstandards/standards.pdf>
- Badke, B. (2007). Re: IL programs - separate, embedded or both Information Literacy Instruction List ILI-L@ala.org. August 15 (Contribution to a discussion on information literacy curriculum).

- Bell, J. (1999). *Doing your research project: A guide for first - time researchers in education and social science*. 3rd ed. Buckingham: Open University press.
- Biddiscombe, R. (2000). The hanging role of the information professionals in support of learning and research. *Advances in Librarianship*, 23, 63-92.
- Boden, D., & Halloway, S. (2005). What's in a Name? *Library + Information Update*, 4(1-2), 26-27.
- Boff, C., & Johnson, K. (2002). The library and first- year experience courses: A nationwide survey. *Reference Services Review*, 30(4), 277-287.
- Bruce, C. (1997). *The seven faces of information literacy*. Adelaide: Auslib Press.
- Bruce, C. (2001). Faculty-librarian partnership in Australian higher education: Critical dimensions. *Reference Services Review*, 29(2), 106-116.
- Buer, V. B. (2005). *In an investigation into credit-bearing courses in information literacy in some selected universities in the United Kingdom*. (Master dissertation, University of Sheffield).
- Caravello, P.S., Herschman, J., & Mitchell, E. (2001). Assessing the information literacy of undergraduates: Reports from the UCLA Library's Information Competencies Survey Project. ACRL Tenth National Conference, March 15-18, 2001, Denver, CO.
- Chartered Institute of Library and Information Professionals. (2004). *Information literacy: Definition*. Retrieved from <http://www.cilip.org.uk/professionalguidance/informationliteracy/definition>
- Colborn, N. W. & Cordell, R. M. (1998). Moving from subjective to objective assessment of your instruction program. *Reference Services Review*, 26(3/4), 125-137.
- Cribb, G., & Woodall, L. (1997). Webbook for engineers: An interactive information skills programme. *New Review of Information Networking*, 3, 245-253.
- Cunningham, T.H., & Lanning, S. (2000). New frontier trail guide: Faculty-librarian collaboration on information literacy. *Reference Services Review*, 30(4), 343-348.
- Doskatsch, I. (2003). Perceptions and perplexities of the faculty-librarian partnership: An Australian perspective. *Reference Services Review*, 31(2), 111-121.

- Doyle, C. (1994). *Information literacy in an information society: A concept for the information age*. New York: ERIC Clearinghouse on Information and Technology.
- Fiegen, A. M., Cherry, B., & Watson, K. (2002). Reflections on collaboration: Learning outcomes and information literacy assessment in the business curriculum. *Reference Services Review, 30*(4), 307-318.
- Flaspohler, M. R. (2003). Information literacy program assessment: One small college takes a big plunge. *Reference Services Review, 3*(2), 129-140.
- Foster, S. (1993). Information literacy: Some misgivings. *American Libraries, 24*(4), 344-346.
- Godwin, P. (2005). Making life easier for academics: How librarians can help staff weather the technological storm. *Journal of eLiteracy, 2*(2), 68-79.
- Goulding, A. (2001). Information poverty or overload? *Journal of Librarianship and Information Science, 33*(3), 109-111.
- Hardesty, L. (1995). Faculty culture and bibliographic instruction: An exploratory analysis. *Library Trends, 44*(2), 339-367.
- Hepworth, M. (2000). The challenge of incorporating Information literacy into undergraduate curriculum. In S. Corral & H. Hathaway (Eds.), *Seven pillars of wisdom? Good practice in information skills development* (pp. 22-32) London: Standing Conference of National and University Libraries.
- Hernon, P. (1982). Instruction in the use of academic libraries: A preliminary study of the early years as based on selective extant materials. *Journal of Library History, 17*(1), 16-38.
- Iannuzzi, P. (1999). We are teaching, but are they learning: Accountability, productivity, and assessment. *Journal of Academic Librarianship, 25*(4), 304-305.
- Jackson, M. G. (2000). Image and status: Academic librarians and the new professionalism. *Advances in Librarianship, 23*, 93-113.
- Johnston, B., & Webber, S. (2003). Information literacy in higher education: A review and case study. *Studies in Higher Education, 28*(3), 335-352.
- Lau, J. (2007). *Information literacy: An international state-of-the-art report, second draft*. Retrieved from http://www.infolitglobal.info/docs/UNESCO_IL_state_of_the_art_report_-_Draft070803.doc

- MacDonald, M. C., Rathemacher, A. J., & Burkhardt, J. M. (2000). Challenges in building an incremental, multi-year information literacy plan. *Reference Services Review*, 28(3), 240-247.
- McCrank, L. J. (1992). Academic programs for information literacy: Theory and structure. *Reference Quarterly*, 31, 485-497.
- McGuinness, C. (2003). Attitudes of academics to the library's role in information education. In A. Martin & H. Rader (Eds.), *Information and IT literacy: Enabling learning in the 21st century* (pp. 244-254). London: Facet.
- Meulemans, Y. N., & Brown, J. (2001). Educating instruction librarians: A model for library and information science education. *Research Strategies*, 18, 253-264.
- Miller, J. M. (2004). Issues surrounding the administration of credit course for medical students: Survey of US academic health sciences librarians. *Journal of the Medical Library Association*, 92(3), 354-363.
- Orr, D., & Cribb, J. (2003). Information literacy—Is it worth the investment? *Australian Academic and Research Libraries*, 34(1), 42-51.
- Patton, M. O. (1987). *How to use quantitative methods*. 2nd ed. London: Sage.
- Plotnick, E. (1999). *Information literacy: ERIC Digest*. Retrieved from http://www.ed.gov/databases/ERIC_Digest/ed427777.html
- Salony, M. F. (1995). The history of bibliographic instruction: Changing trends from books to the electronic world. *Reference Librarian*, 51-52, 31-51.
- Seamans, N. H. (2001). *Information literacy: A study of freshman students' perceptions, with recommendations*. (Doctorial dissertation, Virginia Polytechnic Institute and University).
- Shapiro, J. J., & Hughes, S. K. (1996). Information literacy as a liberal art: Enlightenment proposals for a new curriculum. *Educom Review*, 31, 2. Retrieved from www.educause.edu/pub/er/review/reviewArticles/31231.html.
- Smith, R. L. (1997). *Philosophical shift: Teach faculty to teach information literacy*. Paper presented at the annual conference of the Association of College & Research Libraries, Naville, TN, 11-14 April 1997. Retrieved from <http://www.ala.org/acrl/paperhtm/d38.htm>
- Walsh, A. (2009). Information literacy assessment: Where do we start? *Journal of Librarianship and Information Science*, 41(1), 19- 28.

- Walton, G (2005) Assessing students is essential for success. *Library & Information Update*, 4(1-2), 36- 37.
- Webber, S. (2001). Myths and opportunities. *Library Association Record*, 103(9), 548-549.
- Webber, S., & Johnston, B. (2003a). Assessment for information literacy: Vision and reality. In A. Martin & H. Rader (Eds.), *Information and IT literacy: Enabling learning in the 21st century* (pp. 101-111). London: Facet.
- Webber, S., & Johnston, B. (2003b). Information literacy in the United Kingdom: A critical review. In C. Basili (Ed.), *Information literacy in Europe* (pp. 258-283). Rome: Italian National Research Council.
- Webber, S., & Johnston, B. (2006). *Information literacy: Standards and statements*. Retrieved from <http://dis.shef.ac.uk/literacy/standards.htm>
- Williams, J. C. (2000). Creativity in assessment of library instruction. *Reference Services Review*, 28(4), 323-335.
- Zurkowski, P. G. (1974, November). *The information service environment relationships and priorities*. Washington, D.C.: National Program for Library and Information Services.