

# INFORMATION LITERACY: DEVELOPING THE REFLECTIVE INFORMATION PRACTITIONER

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## ABSTRACT

The central theme of this paper is the implementation of Information Literacy provision for a Chartered Institute of Library and Information Professionals (CILIP) accredited M.A. programme. As the term "Information Literacy" covers a number of definitions and information practices the paper relates to several of the conference's key topics. For example, the predominant reliance on electronic provision addresses the issues of supporting e-learning and evaluating the effectiveness of Information and Communication Technologies. In addition, the efforts made to ensure that the MA addresses the information practitioners' Continuous Professional Development needs relates to the implementation of life-long learning by applying the heuristic strategy promoted by the IL approach. In line with the literature and the recommendations of information professional bodies such as Society of College National and University Libraries (SCONUL) and the American Library Association (ALA), Information Literacy is seen as the foundation of independent learning needed to support academic and professional development practices. IL integration at postgraduate level is illustrated through the delivery of the Applied Information Research module and the use of the knowledge-spiral approach to encourage students to engage fully with the processes of independent learning and reflective practices.

## Keywords

Knowledge-spiral; reflective information practitioner; Action Research approach; information literacy

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## 1. INTRODUCTION

The paper explores examples of Information Literacy (IL) provision by the Information Management school at London Metropolitan University and illustrates how this contributes to the application of experiential learning in the curriculum of a CILIP accredited M.A. in Information Services Management to promote a reflection-in-action [1] approach. This development builds on previous research on IL provision for dissertation students on the BSc in Information Management [2] funded during phase two of the LTSN-ICS development fund (2002/03). The [www.ilit.org](http://www.ilit.org) site sponsored by LTSN-ICS offered wider applications than originally planned as it was also used to support postgraduate dissertation tutees with low information literacy and independent learning skills. By the beginning of the first semester of the academic year 2003/4 the Applied Information Research website had expanded further to include access to online resources and IL tutorials in support of the research module and the dissertation of the MA in Information Services Management. Although postgraduate research develops more complex critical thinking and knowledge creation skills compared with those achieved by undergraduate dissertations, nevertheless, there is a level of continuity in the reflective practices covered by the two studies of the impact of IL provision at undergraduate and postgraduate levels of Library and Information Science (LIS) programmes. This paper reflects on the issues related to the post-graduate research module: Applied Information Research which was introduced for the first time in September 2003. This development replaced the existing Social Science Research Methodology module as the Information Management team felt that a more applied approach to research was needed to equip future information professionals with real world research skills.

## 1.1 Professional perspectives of Information Literacy

Probably the most quoted definition of IL is the one produced by the ALA as far back as 1989 which links information skills to independent learning "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 [...] Ultimately, information literate people are those who have learned how to learn." [3] This paper fully endorses the ALA's view that "What is called for is not a new information studies curriculum but, rather, a restructuring of the learning process..." [4], and explores ways in which provision at London Metropolitan University has changed to implement the IL approach proposed by the ALA in conjunction with reflective research practices rooted in the LIS domain.

Some information practitioners are reluctant to use the term "literacy" because of the perceived association with the issue of illiteracy and "the continuing implication that librarians are dealing with clients on a basic or even remedial level." [5]. However, a more appropriate definition of higher literacy is used here which "entails the ability to make inferences from material, formulate questions and develop ideas." [6]. This description, therefore, elevates information literacy to a method of enquiry that is appropriate for post-graduate research work, one that operates at the knowledge-creation end of the learning spectrum [7]. This is complemented by Hepworth's definition of IL where the term is given a professional dimension and describes: "The ability to participate in the development of one's profession and the ability to continuously gather information in one's professional field, ability to develop one's tasks and continually search for data, information and knowledge to fulfill these tasks" [8].

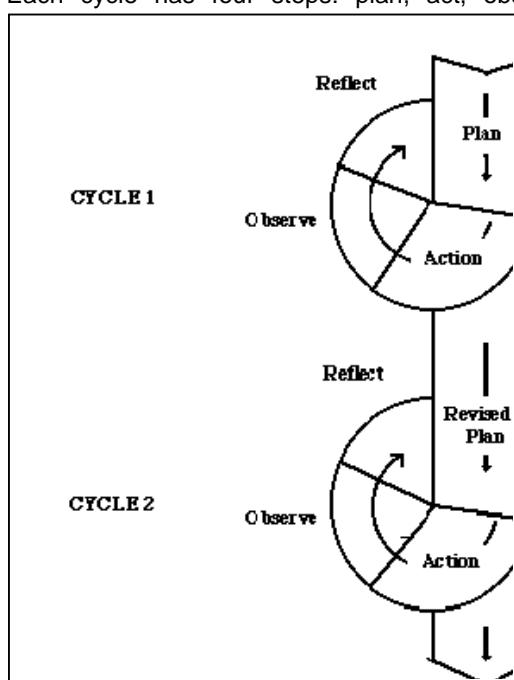
As advocated by SCONUL, IL provision must be fully integrated into the curriculum in order to maximise its impact. The case illustrated here operates this integrated model by developing research skills and a culture of independent learning within the research-specific module of the MA. Learning, in this case, is experiential and reflective as it operates on the principles of iteration and progression. Bawden and Robinson define the learning accomplished through these processes as a "knowledge spiral" [9] where the acquisition of knowledge takes the learner to higher and more complex levels of competence.

## 2. INFORMATION LITERACY: IMPLEMENTING THE KNOWLEDGE-SPIRAL APPROACH

Information Literacy provides the framework for Applied Information Research (AIR), one of the

core modules of the MA in Information Services Management. This follows a recommendation by the American Library Association, which states that: "Librarian education and performance expectations need to include information literacy." [10]. Here IL is contextualised in the AIR module through the development of research design skills required to produce a bid for funding, and of communication skills through practice and assessment in a range of dissemination strategies using a variety of media. This is in line with Hepworth's view that library staff need "... to broaden their perception of information management to include the management of data. This is becoming increasingly apparent in the digital library environment [and because of this library staff] would benefit from courses in research methodology and experimental practice as well as methods for presenting and visualising information." [11]. Although Hepworth refers specifically to library staff, AIR aims to address the needs of information practitioners working both within and beyond the library environment.

The development of the AIR module also followed consultation with information professionals from a range of information sectors, who have a long-term working relationship with the school through the placement system. The consultation exercise identified a range of competences that employers expect in newly qualified information practitioners. These are: knowledge of information sources, a flexible 'can-do' attitude and good communication skills. The applied nature of investigative work is reflected in AIR through provision that encourages experiential and reflective learning associated with the more complex knowledge-creation aspect of IL. This spiral/cyclical learning process is fully embedded in the module syllabus through an Action Research perspective shown in Figure 1, where: "Each cycle has four steps: plan, act, observe,



reflect" [12].

#### **Figure 1: Action Research Cycle [13]**

This process fully reflects the elements of learning promoted by Bruce's IL model [14] composed of the following three main stages: undertaking information literacy practices (i.e. learning); reflecting on experience (i.e. being aware of learning) and applying the experience to new contexts (i.e. transfer of learning). The element of formative feedback plays a crucial role in facilitating reflection on the research activities that students undertake throughout the module. Provision of formative feedback on students' practice in research and dissemination strategies has been shown to motivate students to engage actively with the investigative processes and tasks. The module's summative assessment includes two components: an oral presentation and a written proposal for external funding. These components test the students' ability to:

- communicate effectively with the targeted audience, both orally and in writing, through the oral presentation of a research proposal and the completion of a written application to fund this research;
- apply research strategies that suit the nature of the project chosen within the added constraint of a 5000 pounds research grant.

To reiterate the importance of this cyclical knowledge process the presentation is assessed first and students are given feedback on their performance as well as on the quality of their research project. The students are expected to use these comments to improve their proposal before the final submission at the end of the module.

Students can select any area of investigation as long as it relates to a clearly identified information environment. This gives the required flexibility of scope, as students who attend the Information Services Management course come from a range of information sectors. However, the majority of the students in this particular cohort were from public or academic library backgrounds. Not surprisingly, therefore, most of the proposals submitted focused on issues of current concern within these two information communities, such as social inclusion and/or life-long learning initiatives. A common theme in the students' investigations was the facilitation of learning, and the consequent assessment of its impact on specific groups of users. The IL approach adopted by the AIR module, therefore, is highly relevant for students who are already working as information professionals, as it enables them to develop the independent learning skills required to fully support the IL strategies they would be expected to implement in their professional practice.

#### **2.1 Use of the ilit.org site**

Although the module relied on traditional delivery methods such as lectures, seminars and lab sessions, such a provision was complemented by the ilit.org website which contained the following resources:

1. Weekly lecture notes and seminars outlines. These were posted on the AIR module webpage so that students could download these and prepare for each session in advance.
2. Online resources, such as: e-journals on information-related subjects and research methods; subject gateways; mailing lists; conference details; examples of funded projects and sites containing guidelines for presentation and budgeting activities. These resources were useful because they offered examples of funded research and gave an indication of the scope required as well as the type of budgeting and dissemination strategies the students needed to adopt.

### **3. AIR SHORT-TERM IMPACT ON STUDENTS**

An open-ended questionnaire was distributed at the end of the module with the aim of gathering qualitative data on students' perspective of their learning experience and the overall impression of AIR. The return rate of the feedback questionnaire was disappointingly low, and although this does not make the feedback representative of the cohort's view as a whole, some interesting themes have emerged from the students' reflection on the AIR module. These can be summarized as follows:

- At the beginning of the module students felt challenged because of the "different way of learning" [15], and also because their unfamiliarity with research practices and the experiential learning approach made the steep learning curve rather daunting. "To begin with I found the volume of work very hard as I felt a bit like I had been thrown in at the deep end" [16]. Although some students welcomed the opportunity to learn by doing, they acknowledged the difficulties encountered by their peers: "... an introduction to the module and the website prior to the start of the semester [would have been helpful and] may have also have prepared us for the initial request for a 500 word critique of a research methodology. Personally I found this a challenge and a good incentive to get straight back to work, but possibly some students found this a bit of a surprise." [17]. It must be stressed that not all students welcomed the opportunity to develop independent learning skills and as a result did

not actively engage in the reflective practices when these were not perceived as having a direct connection with the assessment. For example, the 500-word critique mentioned earlier was completed by seventeen out of the forty-one students, while the group presentation was attempted by the entire cohort. Given that the first assessment component was a presentation of the bid to an adjudicating panel, the group presentation had a direct bearing on this and therefore generated active and widespread participation. Informal feedback from students has revealed that lack of time was responsible for the low response, although "Fear of failure" [18] might also have played a part in this.

- Those students who actively engaged with the web-based resources and practical exercises found that research skills, identification of, and communication with the targeted audience improved over time thanks to continual practice and to feedback from tutors. Students' comments on specific improvements confirm the benefit of this approach: "the group-presentation work helped highlight problems and potential ways of improving visual/oral skills. Individual presentations benefited from this" [19].

"My ability to develop an appropriate research design has greatly improved... the practical approach of actually working on a research bid has been helpful." [20].

"I still need to work on my writing skills although they have improved thanks to the feedback from the tutors." [21].

#### 4. AIR RESULTS

The main impact of AIR has been the substantial increase in students' confidence in developing and expressing their own ideas and translating these into research projects. Out of the 41 students attending the module five have actually received funding from their employers to implement the proposal submitted for AIR, which confirms the high quality of the work submitted and the applicability of the research to their work environment. For some students AIR has not been an easy learning experience and feedback from the written tasks gives some insight into the problems they had to overcome. The results from the first exercise, for example, show that the majority of the students who submitted work were unable to operate within the brief given, did not provide adequate evidence in support of their arguments, did not use an appropriate referencing system, and lacked a clear and structured writing style. Formative feedback was particularly useful in raising the students' awareness of these problems and provided an additional motivating factor resulting in greater

engagement with reflective practices to improve their skills. This could account for the overall low failure rate of four out of forty one.

The emphasis on provision of investigative practices that are appropriate and relevant to a range of information communities has certainly helped to motivate the students and has contextualised Information Literacy in the LIS curriculum of the MA. What remains to be seen is whether the IL skills nurtured by AIR will be used to enhance the quality of the dissertation work and to what extent the resources offered by the AIR website are useful in supporting independent research. To address these points, profiles of a sample of students who have completed the Applied Information Research module, and are now doing their dissertations, will be presented at the conference. The profiles will aim to assess the level of transferability that has occurred as students attempt to apply the newly acquired independent learning and reflective skills to their own investigations and to illustrate the extent and quality of these students' interaction with the web-based AIR resources.

#### 5. CONCLUSION

As mentioned earlier, one of the main problems encountered during the delivery of this module was the reluctance by some students to engage with some of the formative assessment practices. The following reasons were given to justify such a lack of involvement:

1. Students found the workload was too onerous and felt that insufficient time was allocated to complete the exercises. This will be remedied in future by introducing the tasks more gradually and by emphasising their overall impact on the assessment. In addition, extra class-time will be allocated to the module so that students will have more time to complete these tasks.
2. Students' lack of self-confidence and fear of failure also prevented them to fully engage with independent learning practices. In future the first session of the AIR module will be used to address at least some of these anxieties, to explore any spoon-feeding expectation that students may have and introduce a culture of independent learning.

The low return rate of the students' feedback is yet another problem that needs to be addressed. Feedback for this module relied on students' willingness to return the questionnaires after the module had ended, and, despite several reminders, a small number of questionnaires were returned. Therefore, reflections presented here illustrate issues raised by the questionnaire's results as well as by the informal feedback gathered from one-to-

one tutorials and class-based activities. However, a more systematic approach is planned for next year where one of the sessions at the end of the module will be dedicated to feedback activities in order to foster students' reflection on what they have learned and explore ways to improve the AIR module.

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