

Does advocacy help to embed information literacy into the curriculum? A case study.

Ruth Stubbings and Ginny Franklin, Loughborough University

Abstract

For over twenty years libraries in Higher Education have been attempting to enhance students' information literacy skills through the teaching of best practice in literature searching. Content of information literacy courses often include the mechanics of how databases work, and more importantly, the higher-level thinking skills, such as problem solving and critical evaluation, underpinning the research process. This paper looks at the work in the development of information literacy competencies run by the academic library at Loughborough University in the UK. This study, which was undertaken by the library at Loughborough University, focuses on the impact of its information literacy programmes, and in particular, it examines the mixed success brought about by the embedding of information literacy education into subject modules. Three main strategies are presented in this paper to fully contextualize the outcome of such provision and promote collaboration between library and faculty staff. Examples here include the attempts made by library staff to encourage the integration of information literacy into the curriculum through the use of learning outcomes, through the delivery of Personal Development Portfolio (PDP) practices, and the employment of preventive strategies against plagiarism.

Keywords:

advocacy, diverse learning styles, RAPID, Personal Development Planning

The library at Loughborough University¹ believes that information literacy courses enhance the learning experience of the students and promote lifelong learning. The library has been delivering information literacy courses for over twenty years, first under the guise of bibliographic instruction, then user education, information skills, and now information literacy. Therefore, in line with Grassian's (2004) work, the library argues that information literacy is not a new approach, but that it has evolved from bibliographic instruction. It does this by focusing not just on the mechanics of searching for information in a particular library, but by encouraging the development of higher-order thinking skills such as critical thinking and evaluation skills and by using a variety of examples and teaching methods.

The main role of the library's Information Literacy Group, formed in 1992, is to raise awareness of library resources and enhance information literacy across the campus. This paper outlines how the library, thanks to the efforts of the Information Literacy Group, has tried to achieve this through advocacy by library and academic staff as well as by students, by promoting the development of teaching skills of library staff, and by enhancing student motivation.

The literature proposes that information literacy courses have far more impact and are seen as more relevant by students if they are subject specific, embedded into the curriculum, and delivered at the time of need. For example Smith and Hepworth argue that information literacy should be taught in schools as part of a "research topic and not taught in isolation" (2005: 47). The Library at Queensland University of Technology (QUT) uses the phrase integrated teaching to describe information literacy courses taught within a module (Hobbs & Aspland, 2003), and adopts the term embedding to describe information literacy education that permeates the whole

¹ this will be referred to as the library throughout the rest of the paper.

degree programme. The aim of QUT is to have information literacy embedded throughout the curriculum so that students are constantly enhancing their skills which are assessed throughout their academic career. The library at Loughborough fully supports this approach and aspires to having information literacy embedded throughout the curriculum, not just integrated into individual modules. Currently this aim is not included in the University's learning and teaching strategy, but the Library hopes it will be in the not so distant future.

As Boden and Holloway (2005) argue the agenda for information literacy in the UK is being driven from the bottom up. This is also the case at Loughborough University. Academic librarians discuss with academic departments, in both formal and informal environments, how information literacy can be embedded into the curriculum. So far this collaborative approach has generated varying degrees of success as librarians have found that formal discussions in departmental meetings are not always as fruitful as they first appear. Departments are always very supportive of the idea of enhancing students' information literacy skills, but are reluctant to fully embed these competences into the curriculum. Why is this the case? The reasons given are similar to those of other institutions both in the UK and overseas (Goodwin, 2003; Poirer, 2005). These include:

- no room in the curriculum
- lack of understanding of information literacy by lecturers
- belief that information literacy and study skills are taught in other modules
- confusion of information literacy with IT competency
- student misconceptions that they know how to search the Internet, therefore they believe they are information literate.

Collaboration between library and faculty staff: finding the appropriate 'hooks'

The library has had more success with the integration of information literacy into modules than into entire degrees. As at Leeds University, the library has achieved this by seeking out academics who are willing to adopt an information literacy approach (Howard & Newton, 2005) by enabling library staff to deliver information literacy lectures and workshops within their modules. The library encourages academic champions to promote information literacy to their colleagues (Jones, 2005), with the result that most departments allow one or two contact hours in key skills or research type modules. Library input may be in the form of small classes, although these are becoming increasingly rare. Large lectures of up to 300 students, or large tutorials consisting of up to 50 students, are more common and they offer class contact time where students are encouraged to translate theory into practice. For example, students are walked through a search, from selecting databases and key words, to sourcing full text. Throughout the whole process the students are encouraged to help select the search tools and evaluate the search results. Some departments have been more willing to integrate information literacy in their programmes, for example three departments, Chemistry, English and Drama, and the Institute of Polymer Technology and Materials Engineering, have arranged for the academic librarians to teach the students in both their first and third year of studies, thus promoting a level of continuity and integration in the way information literacy is delivered.

The library believes that academic librarians have to be the main advocates to further the information literacy agenda across campus and that they need certain skills and hooks to help them achieve this. In terms of skills academic librarians need to be equipped with effective communication, as well as persuasion and marketing competences, and also need to offer good teaching and facilitating strategies. Hooks available to academic librarians are: prevention of plagiarism, the support of initiatives such as Personal Development Planning (PDP), and aligning information literacy competences with content and with the module learning outcomes. This paper focuses on these three strategies as effective ways of promoting collaborative work

between library and faculty staff, although in practice individual librarians tend to use skills and hooks that fit their personality and the situation at hand.

Plagiarism and prevention strategies

Plagiarism is now a national issue. Increased interest in plagiarism is shown by articles regularly appearing in the educational press and by the debate involving most of the UK universities particularly on whether plagiarism is a growing problem, and whether Higher Education Institutions should invest in detection software. Four years ago the library (Brine & Stubbings, 2003) investigated student understanding of plagiarism and their approach to academic writing. Findings from this study demonstrated that, in most cases, students plagiarised through lack of understanding or because of poor study skills. Therefore, the library's stance is strongly on the side of prevention, not just detection, and, in line with these preventive practices, has developed course material both for online and face-to-face teaching. As the library is very vocal on this issue, departments have been increasingly keen to invite library staff to talk to their students about the topic. This had led to requests for face-to-face teaching on plagiarism, and has allowed for the introduction of other information literacy topics, such as citation, problem solving, evaluation and study skills.

Personal Development Planning: a RAPID approach²

Personal Development Planning (PDP) involves many agencies, including learning support departments. At Loughborough the Civil and Building Engineering Department was the first to implement this approach. Since 1998 the University has been working with the construction industry to create an online tool Recording Academic, Professional and Individual Development (RAPID) that would encourage Civil and Building Engineering students to reflect on and record their development of professional and personal skills. Library staff were consulted, but efforts to include information literacy in the RAPID programme as a topic in its own right were unsuccessful, and only some aspects of information literacy were incorporated into three areas of RAPID. These were: Information Technology, Communication and Problem solving. A few years later the Professional Development Department and the RAPID project team created a generic version of RAPID, where information literacy is acknowledged more openly and is integrated into two areas: Applying Academic Skills and Reading and Gathering information, and Applying Information Technology: Searching / Finding Information.

In 2005 the library began to develop a more in-depth section in the RAPID programme which incorporates all aspects of information literacy using the SCONUL Seven Pillars of Information Literacy (Lock, 2004) as a basis for the profile statements. These will be made available to academic staff and students via learning materials placed on the University's virtual learning environment. It is also hoped that in the future these more in depth profile statements will be incorporated in to the generic RAPID.

The advocacy efforts of librarians to get information literacy embedded into the curriculum has received a boost from external initiatives. The guidelines devised by the Quality Assurance Agency (QAA) in 2001, for example, encouraged universities to provide opportunities and support for reflection and action planning to promote lifelong learning and employability. As Smart (2004) suggests, libraries should promote the personal development planning agenda so that information literacy can be fully embedded into the curriculum. Some academic departments at Loughborough have shown particular interest in the library's offer to make overt links between

² Loughborough University, November, (2005) *Rapid projects* [Online]. Available at <http://rapidprojects.lboro.ac.uk/> (Accessed 11 November 2005).

its workshops and the PDP process during face-to-face teaching sessions. In one example, a simple offer to demonstrate RAPID led to a full-blown workshop on how it can be used. The academic librarian devised a session on finding information for an up-coming assignment and interspersed the content with context-sensitive use of skills auditing, evidencing and action planning using the tool. From 2005 this workshop has formed part of an annual contribution to the Institute of Polymer Technology & Materials Engineering's study skills module.

Learning outcomes: information literacy as transferable skills

Further to the strategy of promoting information literacy through PDP the library is investigating departmental use of learning outcomes as a way of embedding information literacy competencies in the curriculum. Learning outcomes state the anticipated learning of students attending a particular lecture or course (Moon, 2001). As part of the University's learning and teaching strategy, each module delivered by the University must include intended learning outcomes for three main areas: knowledge and understanding; subject specific skills, and transferable skills. The majority of modules has statements relating to information literacy under transferable skills. However, the terminology is variable and there is often no indication of how the students will acquire and demonstrate mastery of these skills. The Library plans to use these intended learning outcomes as a lead to discuss ways in which information literacy competencies can be developed and assessed, thus ensuring greater integration of information literacy into the curriculum.

Information literacy frameworks

Several higher and further education librarians have outlined, in journal articles and conference papers, how they are trying to instil information literacy in the curriculum through a top down approach. For example, the following academic libraries have created information literacy frameworks and/or competencies that are assisting librarians in disseminating knowledge of information literacy across campus, and are integrating information literacy into modules or embedding it throughout the curriculum. Examples of institutions who have adopted an information literacy framework include: South Bank University (Goodwin 2003); Leeds Metropolitan University (Waller & Douglas 2003); Queensland University of Technology (Hobbs & Aspland, 2003); Edge Hill College of Higher Education (McLoughlin, 2004); The Open University (Needham, 2004); Cardiff University (Jackson & Mogg, 2005); University of Plymouth (Smart, 2004) and the University of Leeds (Howard & Newton, 2005).

The library at Loughborough University has decided to adopt similar practices by developing an information literacy framework and a set of competencies that can be disseminated across the University, as it is felt that this approach will:

- raise the profile of information literacy amongst academic staff
- help academic librarians understand the "complexity of information skills support offered" (Goodwin, 2003: 90) and give them more confidence to enter in discussions with departments
- assist library staff in discussions with academics to help negotiate appropriate content at sensible times in a student's study pathway and appropriate lecture and / or lab time (ibid.)
- help illustrate how an academic departmental approach to information literacy can work, rather than just a module approach (Howard & Newton, 2005).

Both Leeds Metropolitan University and the Open University gave the library permission to adopt their materials and these resources were used as a starting point for the development of an in-house framework at Loughborough. The framework is an A4 sheet outlining the Chartered Institute of Library and Information Professionals (CILIP) definition of information literacy and why the library believes it is important to develop these skills. The competency document lists the

minimum skill level of a first year undergraduate, third year undergraduate, taught postgraduate student, researcher and academic staff. As mentioned earlier, the competencies are loosely based on SCONUL's Seven Pillars of Information Literacy and show a progression in the development of each skill area. As course structures and teaching styles differ within each academic department, it follows that the information literacy needs of the students will vary, therefore the competencies are designed to be used flexibly. For example, the Social Science Department expects their students to be able to find journal articles using databases within their first year. In contrast, the Engineering Faculty does not require their students to find journal articles using databases until their final year.

The actual creation of the framework and competencies took less than two months. However, as Howard and Newton discovered (2005), it can take longer to present new ideas at university committees than first expected. For example, at Loughborough the framework and competencies were presented to the Professional Development & Quality Team (PDQ) who welcomed the initiative, but felt that the competencies would be better presented as profile statements and asked for a restructuring of the framework in line with this. The writing of profile statements is a complex undertaking as there must be obvious progression as well as the use of appropriate language and taxonomy, making this a time consuming process. The Information Literacy Group feels that the statements in the framework align closely with the PDP statements, thus promoting both initiatives at the same time.

Libraries that have adopted the top down approach have found that this does not ensure immediate access to the curriculum by library staff, and that negotiation skills and patience are essential to initiate collaborative work with faculty staff. Thus the library at Loughborough University feels that it needs to provide its staff with not only the framework and competencies, but an advocacy plan similar to that put forward by Francis Roscello (2003). In other words, the academic librarians should:

- be clear of their objective (embedding information literacy into the curriculum),
- know their target group (all lecturers),
- consider strategies for implementation and communication of the objective (use of PDP's, module learning outcomes and the information literacy framework),
- adopt methods of evaluating success (critical mass of modules with an assessed information literacy component).

Future plans by the Information Literacy Group include the aim to produce similar web pages to those developed by the library at Queensland University of Technology Library (QUT, 2005), which are aimed at faculty staff and outline the importance of information literacy courses as well as illustrating how these programmes can be embedded into the curriculum. The group also intends to produce a printed checklist that can be used to help negotiate content and length of courses and which acts as a basis for discussion and negotiation of the information literacy continuum throughout a programme's objectives, learning outcomes, assessment and location for each course. This checklist would follow the example shown in the Teacher Librarian toolkit (2003), although it is the library's intention to produce a far shorter version, and one which addresses the needs of a UK higher education institution.

Training programmes for library staff

Hooks alone are not enough, librarians need a set of teaching skills to further substantiate the educational aspect of information literacy. Knowledge of pedagogy (Powis & Webb, 2005) and education-speak (Tarter & Wavell, 2005) enable a librarian to push the right buttons with faculty staff and could facilitate the consolidation of information literacy into modules or guarantee its integration into the curriculum. In other words, effective use of learning and teaching strategies by librarians encourage students' active engagement with information literacy.

Information Science departments and Library schools, whether in the UK, America, Australia or New Zealand, do not seem to adequately prepare librarians to teach. As Doskatsch claims (2002) librarians often acquire these skills through self-learning and attendance at professional workshops and conferences. Programs such as *Immersion* offer an opportunity to address this shortage of skills and seem to be popular with academic librarians at US universities. (ibid.).

The library encourages academic librarians to enhance their understanding of information literacy and pedagogy by attending a mixture of continuing professional development events and formal teaching courses aimed at both academics and librarians. As a result one academic librarian has obtained a teaching qualification from another university and two academic librarians became full members of the Institute of Learning and Teaching (ILT).³ Courses aimed at librarians attract well motivated individuals who wish to share experience of information literacy teaching. Events which attract a mixture of participants offer an additional dimension as they clearly illustrate that library staff across the Higher Education spectrum often experience similar pedagogical challenges. Moreover, the cross-fertilisation of faculty and library staff that emerges from these events helps the library to spread an understanding of the role of the academic librarian and information literacy across the campus.

When this training approach was introduced at Loughborough University it encountered a number of challenges. One of the first obstacles was to convince the University's Professional Development department to open their teaching courses to library staff and it took two years of negotiation for this department to acknowledge that support staff need teaching skills, not just presentation skills. A compromise was reached through the development of a teaching and learning programme specifically aimed to address the needs of support staff. As a result of this programme three academic librarians are seeking to become associate members of the HEA. Another challenge is to convince those library staff who need to develop teaching competencies to attend this programme. Not surprisingly this is an ongoing problem.

Academic librarians that have obtained an understanding of learning and teaching theory through CPD and formal courses, find it easier to discuss with faculty staff why information literacy should be integrated into a module. Agreeing learning outcomes with faculty staff should mean that context-sensitive, not just-in case content is delivered. It also ensures that the library input fits into the objectives of the module or programme as a whole. For example, the academic librarian for the Institute of Polymer Technology & Materials Engineering delivers workshops on traditional literature searching and using patents and design information to support the module learning outcomes of: search, systematically, for literature pertaining to a particular topic; scientific method of problem solving; and the ability to use and interpret data from a variety of sources.

Challenges faced by library staff

The integration of information literacy into modules, raises a number of challenges around student motivation and engagement with information literacy practices, this is particularly problematic when library staff are faced with large cohorts. In addition, as Webb and Powis point out, library staff in higher education are "most often work[ing] with strangers, running one off and impromptu sessions" (2005: 50), and therefore are unable to build up a long term rapport with the students. These problems are compounded by wrong assumptions held by the students who equate being able to search the Internet and find one or two relevant websites to being information literate. For example, both the Jubilee (2002) and Justeis (Urquhart et. al., 2003) projects discovered that students tend to over estimate their searching skills and do not always appreciate the need to be taught how to find good quality information quickly and effectively.

³ The ILT was recently renamed the Higher Education Academy (HEA)

Students, and in some cases faculty staff, also confuse IT with information literacy (Rutter & Mathews, 2002).

Librarians have to explain to students why information literacy is important by addressing the 'what's in it for me' attitude. Colleagues use a variety of means to convey this message, ranging from planting the idea that developed information literacy skills are associated with good degree results, to peer persuasion, in the form of feedback from students who attended previous information literacy sessions. They also use a range of techniques to motivate students, including assessment and reflection, as well as appealing to diverse learning styles.

Goodwin (2003) argues that assessment driven students are more likely to develop their information literacy skills. Johnston and Webber (2003) also note that students are more likely to place emphasis on outputs which count towards their degree. At Loughborough, until recently, the library input was not formally assessed, and to date only one module is assessed by a lecturer marking a bibliography and reflective description of a literature search while two modules are assessed via online tests.⁴ Library staff therefore have to find other ways to motivate students to attend and actively take part in information literacy classes. This will vary depending on the academic librarians' teaching preferences and confidence.

Some academic librarians encourage students to reflect on their ability to search databases effectively or to select the 'right' articles for their assignments. Reflection in the form of checklists or brainstorming can take place at the beginning or the end of a class, or both. It can also take place before hand through the use of online diagnostic tests, although in our experience, the main issue with online diagnostic tests is that students do not always recognise the importance of completing them before they attend a class, especially if the tests do not count to the final mark for the module. This may be because the students do not see the academic librarians before taking the tests. They come to the whole process unprepared and have therefore little intrinsic motivation to undertake work outside of the classroom.

Students are also far more likely to be engaged if the style of teaching matches their style of learning. According to Domino (1971) this is a serious issue. "Students who are taught in a manner incompatible with the way they learn, learn less and express less satisfaction with the effectiveness of the teacher" (Bodi, 1990: 114) Examples of diverse learning styles have been illustrated by Best who argues that 37% of people have a preference for kinaesthetic learning (2003: 64), 34% auditory (ibid.: 62), and 29% visual learning (ibid.: 66). As learning is personal, students must be allowed to develop their own understanding and in ways that suit their learning needs. This approach is in line with the view that when an idea has meaning to an individual it is likely to be understood and learned (Sotto, 1994).

Given that "students are not receptacles for wisdom deposits" (Spence, 2004: 485) and that they dislike formal lectures, role plays and presentations, and prefer interactive lectures and group-based activities (Sander et. al, 2000), it is imperative that they are engaged in a learning process based on the latter approaches. Large lectures are therefore not the best method of teaching information literacy skills, but often library staff are constrained by the environmental conditions they operate in and therefore forced to use lectures. To overcome this, most of the librarians include several student activities into their large group teaching. This may take the form of group brainstorming, voting through the show of hands etc. Most of the academic librarians agree that interactive workshops and lectures not only keep students awake, but also are the only sensible way to teach what are highly practical skills. In order to capture and share best practices in the provision of information literacy, library staff at Loughborough has introduced a shared drive

⁴ These tests are available on the University's VLE only.

where lesson plans, presentations and worksheets are stored, and is currently working on the development of a small database of activities.

Conclusion

Does advocacy help to embed information literacy into the curriculum? As this paper has shown Loughborough has found embedding information literacy in the curricula a difficult process, and the process of advocacy by library staff has been successful in achieving integration of information literacy classes at module level, but not at programme level.

Students are not being given the opportunity by lecturers to continually enhance their information literacy skills throughout their courses. Hopefully, a more formal top-down strategy will be implemented in the future to help this process by openly embedding information literacy into the University's learning and teaching strategy. However, this does not automatically mean that information literacy will be mandatory in all the programmes. We suspect that the integration of information literacy will still require close collaboration between faculty champions and library staff in order to encourage the adoption of information literacy education across the curricula. Clearly there is still a long way to go before we reach this goal.

Biographies



Ruth Stubbings is the Academic Services Manager supporting the learning, teaching and research needs of the Social Science and Humanities Faculty.



Ginny Franklin is an Academic Librarian in the Science Team.

Both authors are active members of the Library's Information Literacy Group and are fully committed to enhance the student learning experience and information literacy skills across campus.

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