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Information Literacy in Higher Education

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Abstract

The paper aims to review approaches to information literacy in Higher Education, discuss the relationship between academics and librarians, and propose the concept of the Information Literate University as part of a vision for the future. The author starts by defining information literacy and identifying key models, in particular the SCONUL 7 Pillar model. She describes information literacy issues from a number of perspectives: the national, institutional and programme perspective, and in terms of the conceptions of pedagogy and information literacy held by the people teaching the courses. This leads to a brief discussion of selected approaches to IL teaching, learning and assessment. Librarians sometimes troubled relationship with academics is identified with references to the literature. Finally, a model for the Information Literate University of the future is described

1 Introduction: Defining information literacy

In this paper I will discuss approaches to education for information literacy, some of the challenges to information literacy education and my own vision of information literacy in higher education. I will begin by noting what I mean by information literacy, and by identifying the information literacy model that I use in my teaching.

The definition of information literacy developed by me and my colleague Bill Johnston, an educationalist who teaches at the University of Strathclyde, Scotland, is:

“the adoption of appropriate information behaviour to obtain, through whatever channel or medium, information well fitted to information needs, together with critical awareness of the importance of wise and ethical use of information in society.” (Johnston and Webber, 2004, 3)

To expand on this:

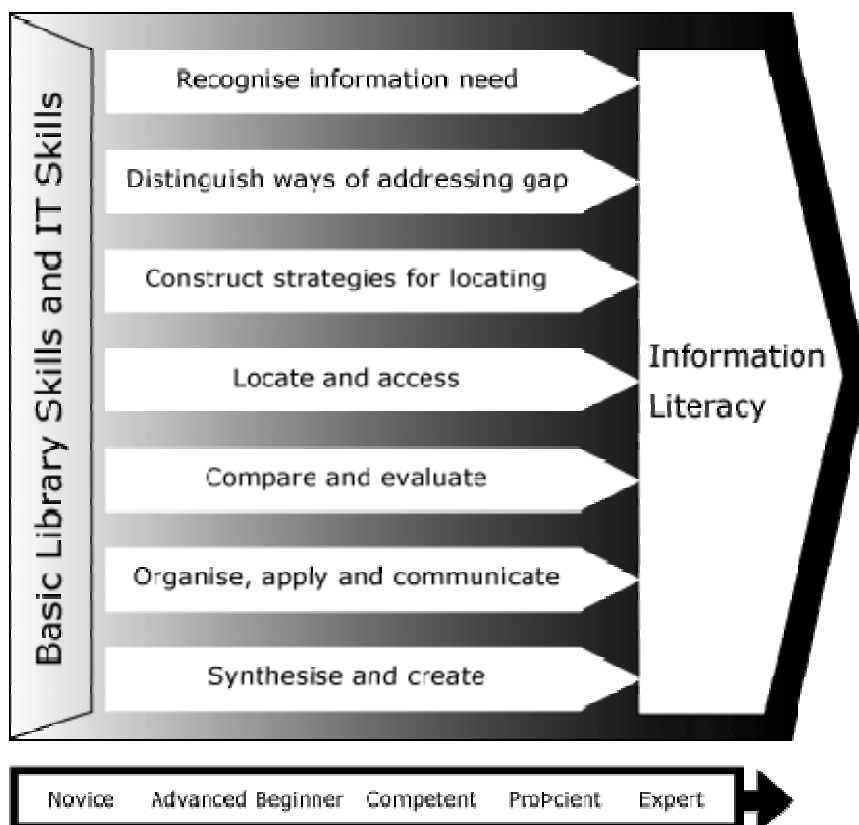
- “appropriate information behaviour” means that the information literate person is aware of what his/her information “habits” are, and is able to adapt his/her information behaviour depending on the nature of the information need.
- “whatever channel or medium” acknowledges that people need many different kinds of information. For example, people are sometimes a good source of information, books may be best in other circumstances, numeric data may sometimes be appropriate.
- “wise and ethical use of information in society” means that information literate people are aware of the way in which information may be culturally sensitive, or politically meaningful. It also means that they are aware of legal issues such as copyright.

The framework for information literacy which I use in my teaching is the SCONUL “7 Pillars of information literacy” model (SCONUL Task Force, 1999).

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Figure 1

SCONUL Seven Pillars Model for Information Literacy
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Some of these pillars are self explanatory, but it is worth noting that “Distinguish ways of addressing the gap” means identifying the gap between what you know and what you need to know, and identifying what kinds of information channels and sources you need to use.

I prefer the SCONUL model partly because it was the one developed in the UK, partly because it emphasises an aspect which I think can be very difficult for students (namely recognising when you have an information need) and partly because of the diagrammatic format of the SCONUL model. I find this format is something which looks more “academic” and is easier to talk about than a list of bullet points. The most obvious alternatives to this model are the *Australian and New Zealand Information Literacy Framework* (Bundy 2004) and the United States’ *Information Literacy Competency Standards for Higher Education* (Association of College and Research Libraries, 2000) There are some key aspects of information literacy which all three frameworks describe: namely identifying what information is needed, accessing, searching for, evaluating, and applying the information, and knowing about (in particular) legal issues such as copyright.

Although the more detailed performance indicators and outcomes in Bundy (2004) and ACRL (2000) can be useful prompts, I find that it is good to have the broad areas covered by the Pillars as a reference point for myself and students. I can then identify more specific learning outcomes within the pillars that match with my students’ needs, and the stage my students are at in their university education.

Thus, for example, in my first year Undergraduate Information Literacy class my students have tasks and assessments which relate to Pillars 1-6, but these are tailored to students who are just starting at university. A particular focus is helping students to recognise *when* they need information and to

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identify *what* their information need is, an area that often seems to be neglected. In later classes students will build on this knowledge (for example, reflecting on what information literacy means in the workplace as part of a Knowledge Management class, or becoming better at synthesising information, in a business class).

In the UK, as in a number of other countries, some universities have adopted the national information literacy framework or developed their own frameworks (e.g. Cardiff University, 2006). More rarely, colleges or universities have collaborated: a North American example is California Community Colleges, which have a joint framework for Information Literacy (Klingberg, 2005). My own University's *Learning, Teaching and Assessment Strategy* now states that all Sheffield graduates should:

"demonstrate the core capabilities and skills of information literacy, interacting confidently with the nature and structure of information in their subject and handling information in a professional and ethical manner" (University of Sheffield, 2005)

In the end, though, the most important thing is that the information literacy framework or definition is one which will (in the end, after a lot of work!) be accepted by the university at every level. Sometimes this can mean using an existing framework, but sometimes it may be that developing a framework for information literacy can be part of the process of getting your institution to "buy in" to the idea of information literacy. I think it is important to have a vision of what information literacy can do for students, staff and the university in general, and I will be returning to this at the end of the article.

2 Approaches to information literacy education

When it comes to discussing the best approach for educating for information literacy, you will find many authors expressing opinions on the subject. There are also a lot of examples of people describing their experiences with particular approaches. There is a much smaller amount of evidence available from research studies.

You can look at this issue from a number of perspectives: from a national, institutional or programme perspective, and in terms of the conceptions of pedagogy and information literacy held by the people teaching the courses.

2.1 National/ Regional

Firstly, there is the national or regional focus. In Sweden, their Higher Education Act has a clause which effectively says that all Swedish university graduates should be information literate (though it does not use that exact phrase). (Hansson and Rimsten, 2005) This is very useful in persuading a university that information literacy is important. I think that the initiatives involving UNESCO are also good because they demonstrate to non-librarians that this is a topic of international importance (see e.g. http://www.infolit.org/International_Colloquium/index.htm).

The nature of the national educational system will influence an institution's information literacy strategy. Obviously economic, social and technical factors will come into play as well. The British approach to higher education is not exactly the same as the American approach. UK education, for example, has more centralised funding and has national audits of teaching quality. The terminology used when talking about education is also different even though we speak "English" in both countries. In the UK, national initiatives concerning teaching quality provided opportunities for librarians to promote information literacy, whereas in Australia the demand for universities to identify Graduate Attributes (skills and knowledge that students graduate with) provided a target for librarians (i.e. getting information literacy listed as a graduate attribute). In the USA there seems to be more of a focus on tests, and so librarians' work with the Educational Testing Service on an ICT Literacy Assessment made sense (see <http://www.ets.org/>).

2.2 Institutional

Secondly, there is the overall institutional (college or university) strategy. It certainly is helpful if the institution acknowledges information literacy by stating that it is an attribute of graduating students, or adopts it as a skill which has to be progressed through every course of study. For example, the University of Auckland's *Teaching and Learning Policy* says that:

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"Academic staff are responsible for ensuring that information literacy skills have been embedded in the curricula, teaching, learning and assessment processes. Academic staff, librarians and learning support providers are partners in providing opportunities for students to achieve the ANZIIL standards in the context of their disciplines." (University of Auckland, 2006)

A policy like this is not a guarantee that all students will be given appropriate information literacy education, but it does mean that academics cannot ignore information literacy altogether. Such policies have usually been achieved after a lot of hard work by librarians, seeking to demonstrate information literacy's value. There may be other stimuli, though, as noted above: for example, national initiatives on teaching or ICT, restructuring of courses, worries about plagiarism, pressure to show that graduates have skills for employment. At my university the introduction of information literacy into our Teaching Strategy was influenced by a high-profile project on inquiry-based learning that emphasises the role of information literacy (CILASS; see <http://www.shef.ac.uk/cilass/>).

If the library director has status as a senior manager within the institution, and is a full participant in the strategic planning process, that also helps both to keep information literacy on the agenda and to ensure that the library's strategy is in tune with the institutions' top priorities. Queensland University of Technology Library uses the Balanced Scorecard approach to setting and managing targets (including ones concerned with information literacy), and there is an interesting range of documents on its policies and plans at <http://www.library.qut.edu.au/pubspolicies/>

2.3 Programmes, Pedagogy and Information Literacy

Thirdly, there is the approach to designing programmes and courses (e.g. a BA in Business Studies, a BSc in Mechanical Engineering). The course design will depend on the approach to teaching that the designers hold, but there will also be other factors such as the requirements of employers, of accrediting bodies, and the topics which are seen as essential in a particular discipline. Each discipline will also have its own conception of what "information" means, and which aspects of information literacy are most important.

Fourthly, related to this last point, there is the conception of information literacy held by the librarians and academics teaching the course. Together with colleagues Bill Johnston and Stuart Boon I investigated the conceptions of information literacy, and teaching information literacy, held by academics in four disciplines: Marketing; English Literature; Chemistry and Civil Engineering. The conceptions of information literacy were different for each discipline, although they also had things in common (e.g. in each discipline there was a conception focusing on the sources themselves).

Thus for Marketing the information literacy conceptions which we identified through our research were: 1) Accessing information quickly and easily to be aware of what's going on; 2) Using IT to work with information; 3) Possessing a set of information skills and applying them to the task in hand; 4) Using information literacy to solve real-world problems; 5) Becoming a critical thinker; and 6) Becoming a confident, independent practitioner. (Webber et al, 2005). The outside world was important in a number of these conceptions: keeping in touch with the latest business developments, preparing to work in marketing. The marketing academics also mentioned a very wide range of information: e.g. company websites, journals and magazines, people, conferences, statistical datasets, geographic information.

In English the conceptions held by the academics were: 1) Accessing and retrieving textual information; 2) Using IT to access and retrieve information; 3) Possessing basic research skills and knowing how and when to use them; and 4) Becoming confident, autonomous learners and critical thinkers. (Webber et al, 2005). For them there was less focus on thinking about the outside world, and more on developing as a person. Searching for new information was less important, and there was more concentration on texts and manuscripts.

This shows that even within a discipline, the aspects of information literacy that are emphasised and progressed through a course will differ depending on the conception that a particular academic has of the discipline and the information literacy appropriate to the discipline. For example, a marketing academic with a "sources" information literacy conception will be very keen to develop students ability to recognise, access and search lots of different sources. However, the marketing academic with a "critical thinking" perspective on information literacy will be more interested in developing students'

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ability to evaluate information sources and think about the implications for using different kinds of information.

I observe that librarians similarly have differing conceptions of information literacy (e.g. focusing on skills, sources or critical thinking), and differing goals for information literacy sessions (sometimes the goal is simply a marketing goal, to make students aware of library services, see Julien and Boon, 2002). This would lead to clashes if, for example, a librarian whose concept of information literacy was focused on sources and searching was trying to work with an academic who saw information literacy as critical thinking.

Finally, different approaches to teaching will result in different approaches to information literacy education. Someone with a transmissive approach to teaching, who aims to tell the students everything and then test how much information the students have acquired may think that information literacy is almost irrelevant to their course, because students are not being asked to search for or evaluate information for themselves. However, a teacher who believes that their job is to facilitate students' learning, and to challenge students to discover meaning for themselves, will probably be much more open to incorporating information literacy into their classes.

In our research we again found that the academics who we interviewed varied within and between disciplines in their approach to teaching information literacy. In Marketing Engineering and English there were some academics who simply identified teaching information literacy as "someone else's job". This was not the case in Chemistry, because it seems that you just cannot be a chemist if you do not have skills in finding and using information.

As an example of the range of conceptions within a discipline, amongst our Marketing academics the different approaches to teaching information literacy were: 1) Someone else's job; 2) Upgrading students' information toolbox; 3) Facilitating access to a variety of resources; 4) Showing students how & when to use information skills; and 5) Helping students understand how information literacy is critical to them, for studying marketing, and for life (Webber and Johnston, 2005). This last conception, facilitating students' understanding of the critical importance of information literacy, is the one that I myself aim for. This means that I now spend less time making sure that students know all the details of specific databases, and more time encouraging students to identify situations where information literacy is valuable to them, to explore problems, think about what information means in different situations and societies etc.

Since information literacy is a complex subject, it is not something that can be taught in a 50 minute lecture, or in one semester. Also, like any other subject, the student's knowledge will ideally be developed and progressed, giving the student enough time to absorb, understand, question, and reflect.

Many librarians respond to this by advocating "embedding" information literacy within a course of study, for example in a preface to the ANZIIL information literacy framework describes four approaches to delivering information literacy and it states that: "The most effective of these components is the embedding of Information Literacy throughout the curriculum." (Bundy, 2004, p7). Tailoring learning outcomes to specific disciplines and levels is advocated (e.g. in ACRL, 2002). There are some examples of this in Bundy (2004) and in Peters (2005). Hobbs and Aspland (2003) give an example of information literacy embedded into a BEd degree. My Department is currently part way through an audit of information literacy education, where we are identifying the extent to which information literacy is progressed through each of our courses. Even in an Information Studies Department there are gaps! However, as I will note later, I do not think that "embedding" alone is the ideal solution.

There are many articles which describe different approaches to learning, teaching and assessment of information literacy. My view is that it is a good idea to start by looking at books which provide an introduction to teaching in general, since pedagogic principles apply whatever the subject (e.g. Biggs, 2003). A teacher has to develop his or her approach to teaching, and learn to respond to the needs of different learners and contexts. Articles focusing on information literacy can be very useful, though, in providing specific examples or explaining a particular approach. I will provide a few examples.

Swanson (2004) advocates a critical pedagogy, inspired by the work of Paul Freire, where a questioning approach is central. Information literacy can be taught in line with this approach.

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Information literacy also supports this approach, developing students power to evaluate the information they are presented with and question how and why it was created. In this context "Librarians and instructors cannot see the role of information literacy within the curriculum as an objective, value-neutral skills set as they have in the past." (p72) This approach entails the teacher discovering and uncovering their own position too: so it moves away from the idea of the neutral, objective librarian-teacher.

Assessment of student learning is vital (Webber and Johnston, 2003) and some articles describe specific types of assessment e.g. a detailed description of portfolio assessment for information searching skills is given by Fourie and van Niekerk (2001). Mulherrin et al (2004) describe an online distance learning credit-bearing course where the assessment is a search log and a multiple choice test.

There has been a good deal of interest in administering pre-tests (at the start of classes) and post-tests (at the end of classes). These may be limited in terms of assessing student learning, especially if the pre- and post-tests are the same (since the student might just learn to pass the test), but if the student uses the information to reflect on his or her performance there can be value. The test administered to students in Quebec (Mittermeyer and Quirion, 2003) has been adapted by some libraries e.g. at Monash University (2005), where they wanted to assess the skill levels of incoming students to a Health Sciences course. Some librarians have used these kinds of tests, and other assessments, as marketing tools, to demonstrate to academic staff that students are lacking in skills and therefore need more time for information literacy (e.g. Jackson et al, 2004).

Relationship between academics and librarians in teaching information literacy

I will say a little about the relationship between academics and librarians, which librarians often view as essential but problematic. In articles in the library press, there is a tendency to say or imply that academics can be awkward and grudging about cooperating with librarians in implementing information literacy programmes. Librarians themselves can be a problem. Lipu (2003) mentions that "balancing the liaison role with internal Library responsibilities is a real challenge" (p65). Librarians may feel that colleagues are spending too much time on their teaching role, which can lead to resentment and friction. The librarians' attitudes to the academics may also be a hindrance to good collaboration. Given and Julien (2005) provide a good review of the way in which librarian authors have discussed the relationship between academics and librarians. Librarians have identified problems in dealing with academics (e.g. librarians' lack of power, academics' lack of time and interest).

Given and Julien themselves describe their analysis of the content of messages posted to the very active US discussion board devoted to information literacy (formerly called BI-L, now ILI-L) over a seven year period. They outline the often negative opinions expressed about academics, and the disagreements between librarians about what librarians' role should be (e.g. should librarians teach academics to teach students information literacy, or should librarians teach students directly). Given and Julien (2005) propose five ways to improve relationships:

- Acknowledge that academics are people too, and they are not all arrogant;
- Do not assume that academics are not interested in information literacy, just because they do not immediately respond with enthusiasm;
- Look for ways to gain academics' trust (e.g. by offering to help them);
- Realise that academics, who may have had poor education in information literacy when they were students, will have developed ways of handling information that work for them, and so librarians need to be patient but proactive;
- Recognise academics as library clients.

I perceive a tension here, since it is difficult to be a servant one day and a partner in teaching the next. How the relationship develops may depend on the nature of the university or college, the general status of librarians, and the willingness of librarians to be proactive and to gain teaching qualifications.

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Librarians are extending their reach by using online tutorials, but providing an authentic experience of online learning, teaching and assessment is time consuming. Even with the help of virtual learning tools, there are unlikely to be enough librarians to progress information literacy through all courses without some help from academics. Therefore the academics may need to learn more about information literacy. Walsh (2003) describes a US community college's approach, with faculty teaching a credit-bearing information literacy class alone and as part of a librarian-faculty team. An important part of this is the training in information literacy provided to faculty who are interested in teaching the class. For large cohorts there may be a number of faculty or teaching assistants teaching in tutorials or labs. Lipu (2003) mentions the importance of briefing and supporting all the tutors who were helping to deliver information literacy within an education module.

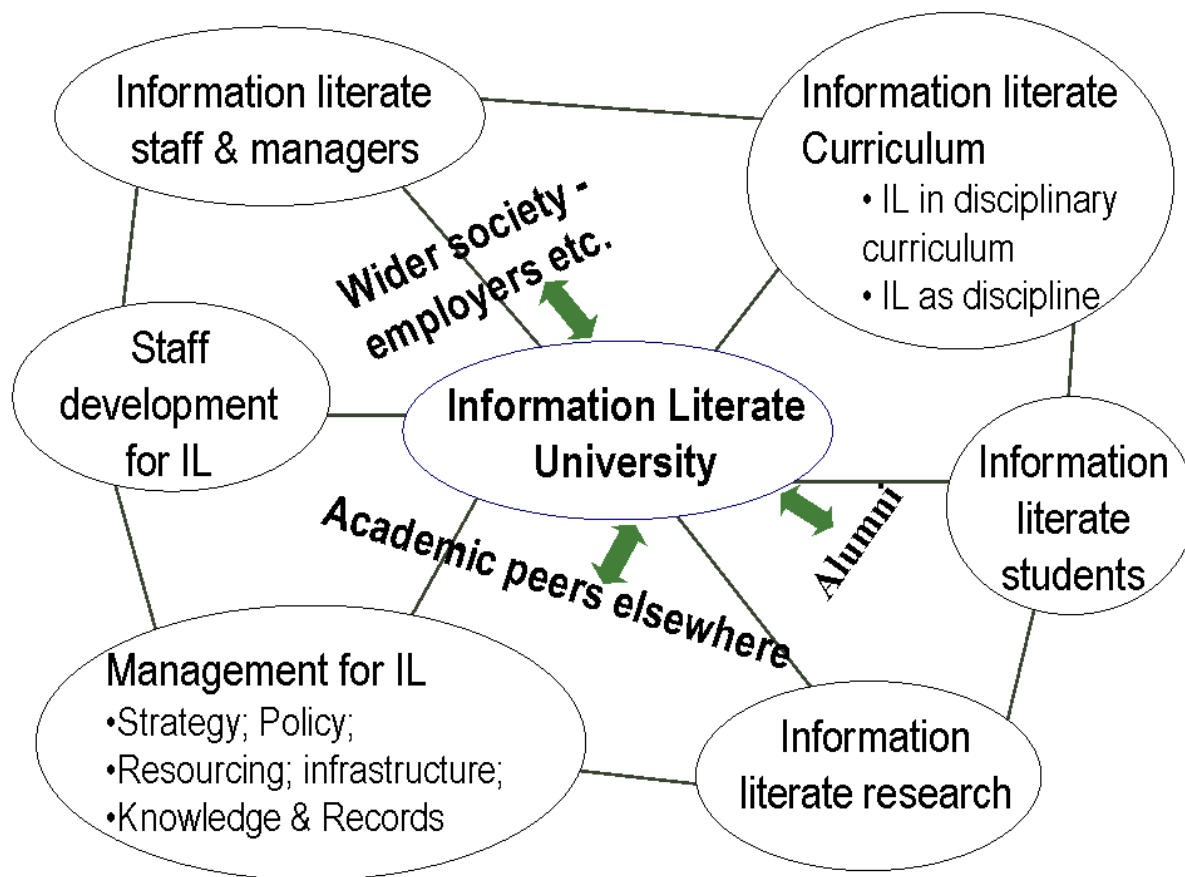
Atkins (a librarian) and Frerichs (a faculty developer) (2002) describe and reflect on a training course for librarians which they designed and ran. As well as developing the teaching ability of the librarians, Frerichs also observes that her own ideas about information literacy and librarians have changed, something which is impacting her teaching.

A number of authors stress the need to have social contact with faculty members (e.g. Lipu, 2003), for example going for coffee with them (Holtze, 2001: of course the nature of this contact will vary depending on the national or cultural context). This helps to create trust between the partners in pedagogy. Being recognised as a peer or expert also seems to be important. Having a teaching qualification, or simply being able to talk as an equal about pedagogy, and demonstrating some understanding of the academic's discipline may be a good start. However, there may be cultural differences here: in the North American context, Given and Julien (2005) point out that academics may resent being treated as peers, because librarians do not normally have academics' doctoral qualifications or research activity. Academics everywhere are expected to be researchers, but in some countries there is more emphasis on all academics' teaching skills, which may make it easier for librarians to be seen as equals where teaching is concerned.

Conclusion

I will finish with my vision of information literacy. Bill Johnston and I have developed a diagram of the Information Literate University (ILU) (Figure 2) which identifies the linked constituents of an ILU:

Figure 2



Our

vision of the ILU requires everyone in the university to become information literate, whether administrators, students, researchers, librarians or academics. All staff need education for information literacy that is tailored to their particular need. For example, many administrative staff are dealing particularly with internal information, but they still need to be information literate in the way they access, use and communicate it. Management for information literacy implies rethinking internal communication and structures. The organisation needs to have procedures, policies, rewards, networks and services in place that encourage and enable organisational as well as individual learning to take place. This means people learning from each other, but also people empowered to change how the organisation works and even its goals and outcomes, in the light of new knowledge.

In Figure 2 *Academic peers elsewhere* and the *Wider society* (including employers) are also represented as elements in the ILU. As a knowledge-creating organisation, a university needs to be able to draw on information from outside, and communicate and share information with outsiders. Academics or research groups may already do this, but on a more individual basis, through formal catalogues or by publishing articles in unwieldy repositories. Technology is enabling more fluid and flexible ways of communicating and sharing (e.g. via weblogs and wikis), although old fashioned ways of exchanging information (by meeting them face to face) still have their place! There should be connections with the schools that feed into university as well as the organisations who are going to employ students once they have graduated. The Cybrary service offered to schools by Queensland University is one initiative which is both good marketing and evidence of a nascent ILU (Blumson et al, 2002). Alumni who have graduated from the university can also demonstrate to students that information literacy is useful in the job market.

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Some indicators of information literacy best practice (ACRL, 2002) and information literacy critical success factors (Town, 2003) have been proposed. I have also formulated some indicators of an ILU (Webber and Johnston, 2006). These include having graduates who understand what is meant by information literacy, and who recognise its value for their future lives as individuals, citizens and workers. Thus I believe that students need to be made aware early on that information literacy is a subject which they need to learn about and in which they need to develop expertise. It will be valuable to identify "disciplinary" information literacies, that progress students' skills in handling and evaluating information specific to their discipline through a course of study. However, in my ideal ILU the students may well also have to pursue some extra information literacy studies, that challenge and develop their ideas about information in society, and encourage students to relate information literacy to their everyday lives.

I think it is important to develop visions of how we think information literacy can empower our students, our colleagues and our nations. We cannot achieve visions if we do not have them in the first place! Librarians do not have a monopoly on information literacy, but they have a unique contribution and can help shape universities and colleges for the better, in the new knowledge economy.

References

Association of College and Research Libraries. (2002) *Characteristics of programs of information literacy that illustrate best practices: a guideline*. Washington: ALA.

<http://www.ala.org/ala/acrl/acrlstandards/characteristics.htm>

Association of College and Research Libraries. (2000) *Information Literacy Competency Standards for Higher Education*. Chicago, American Library Association.

<http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm>

Atkins, P. and Frerichs, C.E. (2002) Planning and implementing a teaching workshop for librarians. *College & Undergraduate Libraries*, 9(2), 5-20.

Biggs, J. (2003) *Teaching for quality learning at university*. 2nd ed. Buckingham: SRHE/Open University.

Blumson, L., Fleming, N. and Turnbull, D. A. (2002) UQL Cyberschool: reaching out for you! *Access*, 16(2), 24-27. http://eprint.uq.edu.au/archive/00000804/01/accessarticle2_web.htm

Bundy, A. (Ed.) (2004) *Australian and New Zealand Information Literacy Framework: principles, standards and practice*. (2nd ed.) Adelaide: Australian and New Zealand Institute for Information Literacy. <http://www.anziil.org/resources/Info%20lit%202nd%20edition.pdf>

Cardiff University (2006) *Information Literacy*. Cardiff: Cardiff University.

<http://www.cardiff.ac.uk/schoolsanddivisions/divisions/insrv/training/infolit/index.html>

Fourie, I. and van Niekerk, D. (2001) Follow-up on the use of portfolio assessment for a module in research information skills: an analysis of its value. *Education for Information*, 19, 107-126

Given, L.M. and Julien, H. (2005) Finding common ground: an analysis of librarians' expressed attitudes towards faculty. *The Reference Librarian*, 89/90, 25-38;

Hansson, B. and Rimsten, O. (2005) "Someone else's job": måluppfyllelse av 1 kap. 9 paragrafen högskolelagen avseende studenters informationskompetens. Örebro: Örebro universitet, Universitetsbiblioteket.

http://www.kb.se/BIBSAM/bidrag/projbidr/avslutade/2005/someone_elses_job.pdf

Hobbs, Helen and Aspland, Tania (2003) Bedding down the embedding: IL reality in a teacher education programme. In *Proceedings eLit 2003: Second International Conference on Information and IT Literacy, 11-13 June, Glasgow, Scotland*. <http://eprints.qut.edu.au/archive/00001392/>

Holtze, T. (2001) *50+ ways to reach your faculty*. University of Louisville.

<http://www.louisville.edu/~tlholt02/present/acrl2001.htm>

Jackson, S., Hansen, C. and Fowler, L. (2004) Using selected assessment data to inform information literacy program planning with campus partners. *Research Strategies*, 20 (1/2), 44-56.

- Webber, S. (2006) "Information Literacy in Higher Education." In: Stopar, K. and Rabzelj. (Eds) *Informacijska Pismenost med teorijo in prakso: vloga visokošolskih in specialnih knjižnic: Zbornik prispevkov*. [Information Literacy between theory and practice: The role of academic and special libraries: Proceedings.] Ljubljana: ZBDS. pp9-20.
- Johnston, B. and Webber, S. (2004) The role of LIS faculty in the information literate university: taking over the academy? *New Library World*, 105 (1/2), 12-20.
- Julien, H. and Boon, S. (2002) From the front line: information literacy instruction in Canadian academic libraries. *References Services Review*, 30(2), 143-149.
- Klingberg, S. (2005) *A checklist of information competencies for college students*.
<http://www.topsy.org/ChecklistLoUp05.pdf>
- Lipu, S. (2003) A flying start for our future teachers: a comprehensive information literacy program for pre-service education students at the University of Wollongong, Australia. *Behavioral and Social Sciences Librarian*, 22 (1), 47-73.
- Mittermeyer, D. and Quirion, D. (2003) Information literacy: study of incoming first year undergraduates in Quebec. http://crepuq.qc.ca/documents/bibl/formation/studies_Ang.pdf
- Monash University (2005) Evaluation of information literacy 2005.
<http://www.lib.monash.edu.au/reports/infolit-evaluation-2005/>
- Mulherrin, E. et al (2004) Information literacy and the distant student: one university's experience developing, delivering, and maintaining an online, required information literacy course. *Internet reference services quarterly*, 9, No. 1/2, 21-36.
- Peters, J. (ed) (2005) *Learning outcomes for information literacy*. London: HEA/SCONUL.
http://www.sconul.ac.uk/activities/inf_lit/papers/outcomes.pdf
- SCONUL Task Force on Information Skills. (1999) *Information Skills in Higher Education*. London: Society of College, National and University Libraries.
- Swanson, T.A. (2004) Applying a Critical Pedagogical Perspective to Information Literacy Standards. *Community & Junior College Libraries*, 12(4), 65-77.
- Town, S. (2003) "Information literacy: definition, measurement, impact." In: Martin, A. and Rader, H. (Eds) *Information and IT literacy: enabling learning in the 21st Century*. London: Facet. pp53-65.
- University of Auckland. (2006) *Teaching and Learning Policy: Information Literacy*. Auckland: University of Auckland.
http://www.auckland.ac.nz/uoa/fms/default/uoa/about/teaching/policiesprocedures/docs/information_literacy.pdf
- University of Sheffield. (2005) *Learning, teaching and assessment strategy for 2005-2010*. Sheffield: University of Sheffield. <http://www.shef.ac.uk/content/1/c6/04/83/65/lta-strategy2.pdf>
- Walsh, R (2003) Involving Faculty in BI- LIB 111: Information Literacy at Ulster County Community College. *Community & Junior College Libraries*, 12(1), 11-19.
- Webber, S., Boon, S. and Johnston, B. (2005) A comparison of UK academics' conceptions of information literacy in two disciplines: English and Marketing. *Library and information research*, 29 (93), 4-15. This will be available online at
<http://www.cilip.org.uk/specialinterestgroups/bysubject/research/publications/journal/archive>
- Webber, S. and Johnston, B. (2003) Assessment for information literacy: vision and reality. In: Martin, A. and Rader, H. (Eds) *Information and IT literacy: enabling learning in the 21st Century*. London: Facet. pp101-111.
- Webber, S. and Johnston, B. (2005) Information literacy in the curriculum: selected findings from a phenomenographic study of UK conceptions of, and pedagogy for, information literacy. In: Rust, C. (Ed) *Improving Student Learning: Diversity and Inclusivity: Proceedings of the 11th ISL symposium, Birmingham, 6-8 September 2004*. Oxford: Oxford Brookes University. pp212-224.
- Webber, S. and Johnston, B. (2006) Working towards the Information Literate University. In Walton, G. and Pope, A. (Eds) *Information literacy: recognising the need. Staffordshire University, Stoke-on-Trent: 17 May 2006*. Oxford: Chandos. pp 47-58. <http://dis.shef.ac.uk/sheila/staffs-webber-johnston.pdf>