“Only Connect”: communities of practice and university students - librarian as conduit, paper presented at the 5th International Lifelong Learning Conference, Yeppoon, Qld, June 16-19 2008

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Communities of practice are learning communities for professionals. In the health area there have been a number of strong developments resulting in some exceptional resources like the UK National Specialist Libraries, which have been designed and developed to “identify and meet the information needs of particular communities of practice”.

This presentation considers how liaison librarians can contribute to the development of lifelong learning in medical and health science students, for whom graduating from university might previously have meant leaving behind familiar resources and learning tools which would effectively not be replaced in their working lives.

Liaison librarians are in a unique position to promote to students, an awareness of online communities of practice which are high quality, free, easy to access and to use, and are fully supported by a strong knowledge management base.

Fostering this awareness in students means they are far better placed to progress as lifelong learners, and as established members of a learning community are better equipped to move seamlessly into their professional lives.

When, in his novel Howards End, Forster urges his characters to “only connect” (Forster, 1973)...

"Only connect the prose and the passion, and both will be exalted ....live in fragments no longer.”

… the author is suggesting that everything we need to make sense of the world is here and waiting, and that we have only to make the effort and commitment to
bring things together, and everything will fall into place. All the requisite parts already exist, only the connecting remains.

The use of the phrase “Librarian as conduit” is my way of echoing his sentiment in relation to connecting graduating university students with relevant and meaningful communities of practice: a deceptively simple-sounding objective which fits sensibly into the scope of a liaison librarian’s role.

University students are expected to graduate today with certain attributes, and prominently featured among them is a commitment to lifelong learning (Flinders University, 2007). Flinders University has a vision of graduating doctors who will “be able to undertake further training for any branch of medicine …. And who will maintain a lifelong commitment to continuing medical education”.

As graduate entry students they fit perfectly into Knapper’s (2000) description of the lifelong learner as someone who:

“is strongly aware of the relationship between learning and real life, recognises the need for lifelong learning and is highly motivated to engage in the process, and has the necessary confidence and learning skills”

The School of Medicine teaching team works in a climate where emphasis on evidence-based practice is a given, and is dedicated to helping students develop self-directed learning skills through problem-based learning. Not only to get through their medical course, but also to set them up, literally, for life.

Traditionally, Liaison librarians have a role which “supports the teaching and research needs” of the School but increasingly they are included at various points in the curriculum, as an active part of that team. It is in this capacity that I give lectures and run workshops for almost all students groups within the School of Medicine – and these are not the generic library skills sessions of yesteryear.

First year medical students have an introductory database session in their first week at University, followed by a hands-on workshop in the second week which introduces them to a range of key resources. Although the workshop is not mandatory, attendance stands at over 90% and feedback is very positive. This session is intended to give familiarity, context and emphasis in regard to those resources. It is integrated into their course and fully-supported as part of their time-tabled lectures. All of which helps to establish from the beginning that the library (and the librarian) are formally associated with their learning.
In second year, the Liaison Librarian, as part of the Medical School’s full-day Evidence-Based Clinical Practice Workshop, delivers a plenary lecture to all medical students on Locating the Evidence, followed by 2 hr workshops which are attended by all students in the subsequent week. The School of Medicine makes these mandatory.

All sections of the workshop are assessed and the evaluations for those run by the librarian rated the highest. Comments often include suggestions that this workshop be run in first year (“first week of first year” was one enthusiastic response), emphasising how relevant the students felt the information to be.

As a University staff member, being located in a teaching hospital means that the Liaison Librarian has many opportunities to build up and develop a network of strong contacts with the wider health sector. Working closely with University students and academic and research staff in the areas of medicine, nutrition and dietetics, medical science, speech pathology, audiology, public health, palliative care, medical biotechnology etc is the core work.

Running workshops for hospital-based staff like physiotherapists, radiographers, nurses, occupational therapists, medical imaging and clinical educators means further developing an understanding of what practice requires. These sessions are often part of in-service training for staff, seen as professional and skills development. In 2007, at the invitation of the Flinders Medical Centre Nursing Quality and Information Systems Unit, I ran workshops to train their Review Co-ordinators.

These were staff charged with heading up Committees, which would then review a large number of hospital procedures. The involvement of the librarian was designed to raise the skill level of those involved, so that the relevant literature was located and accessed in a far more systematic way than in previous reviews, which would in turn lead to more informed practice.

Working with hospital staff and health researchers who graduated before the emphasis on evidence-based practice, it becomes strongly apparent that a real need exists for a connection to be made between them, and the resources that are essential for clinical rigour.
“Practitioners and researchers expect instant connection to related knowledge, including guidelines, protocols, clinical alerts, and relevant published data” (Lindberg, 2005)

The steadily growing number of invitations from these groups arise from the increasing recognition that to practice evidence-based healthcare there is a need to be able to successfully interrogate the current literature, and that health sciences librarians are best-placed to share the knowledge of those resources and teach those skills to other professionals (McGowan 2005, Knight, 2006).

In the journal article “Librarians, Surgeons and Knowledge” published notably in the Surgical Clinics of North America, Knight describes one of our key roles as “Support for work-based and lifelong learning, training, and research”.

The number of articles which examine the integral role of the librarian in health research, appearing in health sciences journals (as opposed to our own professional library literature), has sharply risen and reaffirms a wider recognition and understanding of our professional strengths. The trend in journal literature reflects the trend in practice.

Rapidly increasing use of the Internet in Australia (ABS, 2007) as elsewhere, means that our students are already very comfortable with online technology and culture.

In a formal sense, current Flinders University students are familiar with an online learning environment in the shape of FLO (Flinders Learning Online) our adaptation of Blackboard Learning Systems. Academic staff deliver most course information and teaching via FLO, and FLO Live is an option that is being increasingly taken up:

“FLO Live is synchronous, web-based communication software that allows lecturers and students, or staff to collaborate with one another by using voice-over-internet (VoIP) audio, share software applications, presentation slides, free-form white boards, and to use a text chat area” (Flinders University, 2008)

In a more social and general sense the majority of our students are definitely at home with a range of communication technologies. They are primed to communicate online. The March issue of Flinders student magazine quotes the Arts contributor:
“... I get off my ‘Facebook’ profile pages, plug in my Apple iPod and disengage ... I communicate to my housemates via text message, even when we are in the same house” (Reed, 2008)

Facebook, for anyone who is still unsure, is a social networking community. MySpace is another. The newspaper article “Online the place to be” (Sydney Morning Herald, 2007) reports that statistically the use of these online communities is growing very rapidly:

“the percentage of internet traffic going to social networking and chat websites in Australia has increased by over 37 per cent during the first half of 2007”

Our students are already “connected” in so many ways that communities of practice, at least in principle, are just another logical step. But which community, where? Everybody is so busy, including the academic staff, who certainly make mention of important resources like the Cochrane Library but either leave the students to work out how to use it for themselves, or more usually ask the librarians to include it somewhere in their training sessions.

In my experience, very few academic staff know the resources well enough to be specific. I have to agree with Lyn Bosanquet (Bosanquet, 2007?) that “academics are not traditionally strong in this area”. They might ask me to run “something on databases” which includes Medline (or PubMed), maybe Cochrane, but usually the rest of the content is left to me. Having the knowledge of what is out there and being given the discretion to use that knowledge gives me considerable scope in the selection of resources. And this is where I’ve been bringing students and communities of practice together.

It means shining the spotlight on free quality resources, (as well as those to which the University library subscribes).

“Knowledge must not only be created by the formidable efforts of researchers, but also be systematically organised and made available to [those] who need it”
Women’s Health Specialist Library, 2008

3 resources stand out as excellent examples of different ways of interpreting the concept of learning communities for professionals which deliver meaningful content and enable and promote a culture of knowledge exchange: the NHS
Specialist Libraries, the BioMed Central initiative and HealthInfoNet with its “yarning places”.

The NHS Specialist Libraries, which first appeared in 2003 (Grindlay, 2005), are designed to “identify and meet the information needs of particular communities of practice” (NLH, 2008). They are brought to us by the UK National Library for Health which aims to be “the best, most trusted health related knowledge service in the world” (NHS, 2008).

Each Specialist Library, from Asthma to Cancer to Mental health to Stroke identifies and provides access to up to date key documents, reviewed evidence and appraised information.

Quality assessed knowledge collections, of relevance to the community that it serves: knowledge that can then be incorporated into practice.

Professionals who use the Specialist Libraries are encouraged to share information in various ways – particularly in identifying gaps in the knowledgebase. One way is by contributing to something called Database of Uncertainties about the Effects of Treatments (DUETs): a resource to help prioritise new research. As the DUETs core team say: “One category of information which is important but rarely assembled systematically, is information about what is not known” (DUETs, 2008). A further development has seen the trialling of NLH’s Primary Care Question Answering Service which attempts to answer clinical questions directly from professionals in the Specialist Library areas and posts the answers on the sites.

This communication, along with RSS feeds, personalized updates via email and most recently Google Groups, will increase interactivity, and as further resources develop, give the participants an ever-growing sense of connectivity along with their information seeking and professional development.

BioMedCentral currently publishes over 180 open-access scholarly journals in the biomedical area. It stands by a rigorous and thorough peer-review process and is committed to “the rapid and efficient communication of research findings” (BioMedCentral, 2008) Authors pay a relatively small fee to publish with BioMedCentral and the articles are free and open access to everyone. Flinders University pays an institutional subscription which covers any of its staff and postgraduate students who wish to publish and meet BMC’s exacting standards. BMC journals are not only indexed on Medline, but have also surpassed some
established print journals in their subject fields, achieving impressive impact factors.

While BMC calls itself “an open access publisher” and “an independent publishing house” I see it much more as another form of professional learning community.

There is the open sharing and accessing of knowledge, the opportunity for stimulating, often scholarly discourse, and BMC also hosts various blogs where people can post comments, responses and discuss questions of interest with other members of an online community. The discussions also provide a definite social networking feel to the site.

The third resource, HealthInfoNet, is arguably the world’s best resource for Australian indigenous health. Devised and maintained by Edith Cowan University in W.A. it brings together in one place references to (and often full-text of ) reports, government documents, journal articles, dissertations, conference papers and other publications. Anyone who has searched for this sort of material a few years ago will know what a boon it is to have such a well-organised resource freely available. The aim of HealthInfoNet is not only to inform practice and policy with quality and up-to-date knowledge, but also to “encourage and support information-sharing among practitioners, policy-makers and others working to improve Indigenous health” (HealthInfoNet, 2008)

To meet this need they have developed what they call ‘yarning places’ described as electronic networks, which allow sharing of knowledge, information and experience. They have web-pages explaining what they mean by “yarning places” and acknowledge these as “communities of practice”. They offer:

- **e-mob list** which provides members’ contact details (permission to display the details is obtained beforehand).
- **e-yarning board** which is an electronic board for discussion and debate about relevant issues.
- **The e-message stick** which is an email list (listserv) for communicating with other members”.

It’s hard to think of a better way one could be involved in a learning community in the area of indigenous health. Anyone I have introduced to HealthInfoNet – from 2nd year medical students to working ophthalmologists- have been impressed and delighted by what it offers. Even indigenous healthworkers, who
attended a workshop I ran and knew of the website, told me they were not aware that it had so much to offer at so many levels.

These are three different examples of communities of practice which offer so much to lifelong learners. Just now I asked the questions which community, where? We need to add a third question, why? as in why this particular one?

The resources are there, the potential members are there – it just needs someone to “sell them”. (It doesn’t have to be a librarian, but often it is) We have to make the resources accessible, interesting, relevant (ie by pre-selection) targeted, worthwhile.

We have to time it so that users value them, become familiar, gain skills, are “sold”. Part of the selling process is developing in the students an understanding of why these resources are important, not just how they work. Students often say a) why wasn’t I told about this stuff earlier and b) can we still use these when we leave here? Subscribed resources obviously pose more problems for continued access when a student leaves university to go into professional life than free ones.

The School of Medicine and the Library have been exploring ways that some licensed resources may be made available to students after graduation, possibly via some sort of an annual fee via the Alumni Association. The negotiations involve a number of complex and convoluted issues which I can’t imagine will be resolved in the near future. Even if this issue remains in the “too hard” basket for the time being, the situation is far from bleak as there is now such an impressive suite of great free resources available to meet professional learning needs.

For those who graduated many years ago the connection process is rather more challenging. Less common as time goes by, it is still possible to come across doctors who reach for, and consult, an outdated, well-worn reference book from their office shelves, for patient-related information. They may also use the Internet, but mainly to search for a “limited number of questions about which they first consult colleagues and paper sources” (Coumer, 2006)

They reach for the reference book because it’s a familiar resource – they know what’s in it and how to use it, and because it’s there. Well thought-out online communities of practice like the NHS Specialist Libraries can meet all of these prerequisites, and more. Doctors who have been familiarised with such resources
at University **know the resource – what’s in it and how to use it.** It’s also “there’ and readily available (via the Internet) and meets the need of providing quality information (more recent than the textbook). The same family doctor might discuss a case with his practice colleagues, or possibly ring a colleague who has expertise in the field to pick his/her brains.

As Gagliardi (2003) suggests, the online community of practice can also meet both these needs:

> “Problem-solving and interaction with colleagues is a basic component of medical practice … Discussions with colleagues in "communities of practice" build mutual trust and foster the exchange of not only explicit knowledge that is easily codified in documents such as guidelines, but tacit knowledge, which prompts the individual to reflect upon their practice”

It can provide information, share knowledge, enable and stimulate discussion and promote professional interaction and commitment.

It’s never too late to get people enthused. Late last year the NHMRC Centre for Clinical Eye Research convened a national seminar for Opthalmologists. The Director is a Professor based at Flinders and I was invited to contribute. I ran a “Locating the Evidence” workshop for participants – many of whom though aware of the need to connect further with the research, were, I sensed a little sceptical and uncomfortable at the start of the session. Professionals for many years, these busy people who had paid good money to attend the seminar, needed to be won over quickly if they were to get anything out of the session that they would take away and use again. Each participant was given a list of scenarios, with questions designed to illustrate the strengths of the resources. We then worked through various resources in relation to each question. I produced very targeted handout that clearly followed the format of the hands-on workshop session. The selected resources were carefully chosen. They were quality, free, strong on evidence, easy to search and navigate, and relevant. Several of those included were what I’d describe as “communities of practice”. Including the excellent NHS Specialist Eyes and Vision Library.

The workshop ran for over 2 hours with a very short break and the response was tremendous. I got terrific feedback and one participant told me he found the session “inspirational”. People went out smiling and it felt like a totally win-win experience. Later I had a memo from the Director saying they had received “extremely positive and complimentary feedback from participants”
The fact that the participants felt confident that they could go home and access these resources on their own without difficulty was definitely the key. Lindberg expresses this in his article “2015 – the future of Medical Libraries” (Lindberg, 2005)

“… people treasure efficient methods for extracting pertinent information from the fire-hose effect of undifferentiated electronic text”

An online community of practice needs to be free, easy to locate, easy to navigate and use – (this means intuitive), have good end support so it is rarely unavailable, well-managed and supported (both by members and the management team). It ideally has quality content, is kept up-to-date, requires no passwords or logins except when absolutely necessary (this is a common reason for frustration). The three communities of practice that I described have these attributes and that makes them suitable for both university students and practitioners (no matter how long it is since they graduated)

In my abstract I said, in part, that “Liaison librarians are in a unique position to promote to students, an awareness of online communities of practice …”. This paper has talked about my role in facilitating and encouraging these connections. I’d like to stress that the world I live in is not librarian-centred! I certainly believe that many others can and do, bring students and communities of practice together. Health sciences librarians however, working in hospitals and universities, have been heartened in recent years to find themselves in a position of strength as their expertise and relevance to teaching and research has been more openly acknowledged.

Librarians have always been about connecting users and resources. It makes sense therefore, to capitalise on this recognition and use it to link people to learning resources and environments that we know are strong and supportive and relevant, and that deliver the goods.

Thank you.

**BIBLIOGRAPHY**


