

# NEW AND EMERGING TECHNOLOGIES

## Open Content: from walled gardens to collaborative learning

The 2009 Horizon Report for Australia and New Zealand lists Open Content as one of the key emerging educational technologies in the next two to three years. While Open Content appears to be relatively straightforward it faces many challenges, such as a lack of creators and features that enhance accessibility. UTS Library is overcoming these challenges by providing open access to Information Literacy tutorials in our InfoSkills (Learning Objects) database, and improving findability through descriptive Metadata and Search Engine Crawlers.

### Why Open Content?

In recent years, we have undergone a shift in content delivery from a top down approach towards a decentralised model that includes user-generated content such as blogs, wikis, and folksonomies. This shift converted previously passive consumers of information into active creators who can gather and disseminate information to a global audience. Because of this shift, we are beginning to see content not as a commodity, but something shared freely and remixed.

The benefits of sharing and remixing content have spurred the Open Education resources movement, encouraging educators to open up their materials to the world. Educators benefit by reducing repetition and saving time by reusing and remixing their colleagues' work. For students, open access helps overcome the rising cost and inequitable supply of education around the world. It levels the playing field, providing just-in-time lifelong learning experiences based on the student's need, rather than institutional resources.

In the context of this movement, UTS Library has created an open access repository of information literacy materials to enable reuse and remix of resources.

### InfoSkills Bank

InfoSkills bank is a database of information literacy materials sourced from both within UTS and the wider education community. It contains lesson plans, class handouts, presentations, and online tutorials in a range of formats, all located centrally on UTS Library's website. InfoSkills Bank is aimed not only at making it easier for students to locate Information Literacy Materials, but also with the intention of saving library staff time preparing and managing teaching materials and to foster sharing of ideas and personal development.

### Increasing findability

UTS Library made a decision early on in the process not to limit access to InfoSkills Bank to UTS users. We also wanted to make our material easy to find, while keeping the content visible to students within the library's website. In order to do this, we used a combination of descriptive metadata and search engine crawlers.

We give Learning Objects metadata during their upload into InfoSkills Bank. This metadata includes title, learning object type (e.g. demonstration, lesson plan), Faculty, experience level, learning time involved, links to related records, and space for free text tagging. This makes it easier for students to locate learning objects in the database itself and provides excellent material for search engine crawlers. Crawlers (also known as robots or spiders) automatically crawl websites indexing new or updated information. All we had to do was make sure our website was open to crawlers, and they did the work for us.

This simple combination of crawlers and descriptive metadata enables people from anywhere in the world to find our Learning Objects.

### Evaluating the idea

We have used Google Analytics to track the progress of the InfoSkills bank and found that opening our content has significantly increased UTS Library's worldwide exposure. In the six months since InfoSkills Bank came into the world, it has received 3972 visits from 475 sites in 80 countries. Over 44% of our traffic comes from external search engines, 40% of that is from Google alone. An analysis of the data tells us that we are not only reaching communities beyond our borders, but also suggests that we are reaching our own students who may automatically lean towards a search engine rather than the library's website.

### Future: supporting social learning

We recently integrated InfoSkills Bank into our new discovery-style catalogue, built on the Endeca Platform. The new catalogue provides a more user-friendly interface for InfoSkills Bank, which makes searching and browsing easier through refinement options and a tag cloud. This move has meant that our Learning Objects have temporarily disappeared out of Google and other search engines as we rewrite the allow/disallow rules for search engines, but that will be fixed in time for Autumn Semester.

We are currently developing InfoSkills Bank even further by improving usability through the implementation of web 2.0 features, which will allow users to tag, rate, share, and favourite objects. This will open a conversation between library staff, our clients, and the world.

With all of these features, we are moving away from institutional walled gardens towards a worldwide participatory community of learners.

You can find a copy of the 2009 Australia and New Zealand Horizon Report here: <http://www.nmc.org/pdf/2009-Horizon-Report-ANZ-Edition.pdf>

Ashley England  
Information Services Librarian, UTS Library  
[ashley.England@uts.edu.au](mailto:ashley.England@uts.edu.au)

## Trove – one search, a wealth of information

The National Library of Australia has combined eight 'national online discovery services' developed over the past 12 years into one free service, Trove (<http://trove.nla.gov.au>), which allows researchers to find information held in Australian collections, including books, theses, reports, research articles, book chapters, sheet music, conference proceedings, papers, records, maps, photographs, artworks, postcards, videos, musical sound, sound recordings of interviews, full text of selected Australian newspapers, copies of significant Australian websites no longer available online, and information about specific people and organisations.

The new service was initially released as a prototype in May 2009 for comments and suggestions from the public. Trove, from 'treasure trove', was then launched in November 2009. Trove supplements what search engines provide with reliable information from Australia's memory institutions, and provides a single point of access to over 45 million items, across both metadata and full text content.

Trove provides FRBR (Functional Requirements for Bibliographic Records) grouping of related items and exploits thesauri. It supports relevance ranking – the retrieved records which are