Libguides: a portal to the next dimension of library instruction

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Abstract
Traditionally, librarians have used printed, and more recently, online library guides to provide assistance and guidance to students about resources relevant to a specific subject or discipline area. The creation involves a significant amount of duplication of effort and the ongoing maintenance is often labour intensive. The Central Queensland University (CQU) Library has now embarked upon improving the process and is using Learning Objects to duplicate the more common content found within online library instruction. However, the time still spent formatting and publishing web pages has led to an investigation for a solution to this problem.

The increasing presence and popularity of Web 2.0 technologies along with a move towards self directed learning has created a nexus which librarians can use to advantage. This situation allows for the creation of online instructional material which delivers synchronous as well as asynchronous media-rich library assistance.

CQU Library has investigated various Web 2.0 technologies, as well as the literature relating to their use in academic libraries. As a result of this investigation, we discovered Libguides. As a Web 2.0 application, built specifically for libraries, Libguides enables librarians to incorporate learning objects, videos, RSS feeds, podcasts, polls and user comments into a library guide, without having HTML or Javascript expertise.

This paper will outline CQU Library’s journey from the initial discovery of Libguides, through the investigation into the pedagogical implications of using this type of tool, along the testing and evaluation path and finally to the creation of the first library guide. As the door opens to a new world of
social connectivity in education the CQU Library has recognised the need to respond quickly and energetically. This paper will conclude with a description of some of the initiatives now in place to take librarians, students and faculty into another dimension of library and information literacy instruction.

**Introduction**

CQU Library has a tradition of responding in an innovative way to the information and learning needs of students. The introduction of LibGuides represents one of the many ways CQU Librarians draw on the learning and teaching potential offered by developing technologies. The use of such technologies is important given the dispersed nature of CQU’s student population which includes not only those enrolled across CQU’s multiple campuses around Australia but many distance students as well. Over the past ten years a demographically changing student population has evolved.

In 2006, over 50% of CQU students were international students studying on campus at Brisbane, Gold Coast, Sydney and Melbourne. The domestic student cohort was evenly split between full-time and part-time students, with only 37% studying face to face at a campus. The age range of CQU students adds to this diversity of location and mode of study. The graphs below demonstrate these age ranges.
Figure 1: CQU domestic student population by age
(Central Queensland University, 2006)

Figure 2: CQU international student population by age
(Central Queensland University, 2006)
Library Guides at CQU

Library guides at CQU were originally a print list of resources with headings such as reference material, call numbers, books and journals. These guides were produced as a starting point for novice researchers in a particular discipline area and are known in the literature as pathfinders, subject guides, research guides or library guides (Vileno, 2007). As access to the Internet became more readily available for students, these lists were converted into static web pages for access at all hours. As this was similar to what a number of academic institutions were doing at the time (Hemmig, 2005; Vileno, 2007), the CQU Library continued along this path for quite some time.

Previously, library guides were the only web based information literacy assistance for students studying at a distance as well as for those whose on campus courses did not incorporate a library tutorial or information literacy session. If students required assistance, they contacted a library by phone or email. This was time consuming and did not always meet the student’s point of need out of library opening hours.

At this stage, the HTML library guides were still basically an adaptation of the print guide listing the various resources that students could use as a starting point to assist in their study. As creating and maintaining these HTML pages was a time consuming process, some liaison librarians decided to add a teaching focus to the guides so they were not only a list of resources but also a starting point for students to develop information literacy skills. Some academic libraries have implemented content management systems which can generate library guides from content stored in a database (Bills, Cheng, & Nathanson, 2003). CQU Library evaluated some of the open source options which were available in 2005; however, the systems investigated did not allow the development of more than a list of resources, and therefore did not meet the needs of CQU Library in its information literacy initiatives.
Learning Objects

Learning objects are a flexible teaching and learning mechanism. They are instructional components that can be used and reused in different learning contexts. Learning objects can vary in size and format, be delivered over the internet, are accessible to simultaneous users and reduce the need for instructors to recreate instructional content each time a course is offered or a new guide or tutorial is produced (de Salas & Ellis 2006).

CQU librarians began experimenting with learning objects in 2005 when usage statistics for the Library’s online tutorial Compass and the Subject Guides indicated that students were not using these resources. At the same time, librarians recognised that a large percentage of their time was used in creating and recreating similar content in many guides. The online tutorial was identified as good place to begin embedding learning objects. Over one hundred objects, representing small, discrete “chunks” of information were created. These chunks were then embedded as hyperlinks within the “story” of the tutorial. The “story” explains a particular concept of information literacy.

Learning objects had, to some extent, solved the problem of tedious and time consuming reproduction of content in guides and tutorials; however the issue of the limited use of the guides remained.

As reported in Reeb and Gibbons (2004), a Duke University survey of over one thousand library patrons found that “53 percent had never used one of the libraries’ Web subject guides, with 24 percent reporting use rarely”. This has been attributed to a number of factors: “students don’t know what subject guides are”, “the concept of disciplines is not usually part of a student’s mental model”, and “students do not understand the subject categorization or organization of pathfinders…”

CQU librarians recognised the potential of using learning objects in library guides, and began embedding generic information literacy learning objects
into discipline specific library and course guides. Placing information literacy learning activities into a discipline context with appropriately designed library guides, has been recognised as beneficial to all stakeholders - students, academic staff and librarians (Vuotto, 2004).

**Web 2.0 technologies**

While still struggling with the issues of how to increase usage of library instructional material and optimising library access to students, Web 2.0 appeared - not on the horizon but merging right into our lane! With the literature suggesting that the latest generation of students in higher education are “digital natives” and their familiarity with technology creates fundamental differences in how they think and learn (Prensky, 2001a, 2001b); the Library recognised the need to get on board. Web 2.0 technologies provide a user centred, multi-media rich, social community that has also been described as the Read/Write Web (Habib, 2006).

CQU Library undertook a project to identify how the currently available technologies could be incorporated into existing library services, including library guides, while providing pedagogically sound assistance to our users. As the library guides are often the first exposure to information literacy for the majority of CQU students, and there is a mix of “digital natives” and “digital immigrants” in the student population, a variety of formats needed to be considered in the delivery of information literacy (Foggo, 2007; Law, 2007). A list of technologies that could be successfully incorporated was developed. The list included synchronous messaging, streaming media, blogs, wikis, podcasts, video conferencing, social networking, tagging, RSS feeds and mashups (Habib, 2006; Kajewski, 2007; Maness, 2006). Understanding how the new media worked, how to create it and incorporate it into existing or new products required technical expertise outside the skill set of the majority of librarians.
LibGuides at CQU Library

In 2007, CQU librarians became aware of a product created by the Springshare Corporation called LibGuides. Investigation determined that LibGuides was a hosted product, created by librarians for librarians, which allowed inexperienced web editors to incorporate a number of interactive Web 2.0 technologies into a subject guide. This appeared to be a product which could significantly reduce the expertise and time required of librarians to create and maintain guides, while at the same time using some Web 2.0 tools and technologies.

A trial was arranged and a number of librarians tested the capabilities and suitability of Libguides as a delivery mechanism for information literacy instruction and discipline specific resource advice. The LibGuides trial included access to training and instructional videos which were easy to follow. The FAQs and the ability to access a list of current LibGuides users and their published guides were invaluable in assisting librarians to make the decision to purchase the product. The product was purchased in November 2007.

LibGuides is a hosted service that will provide a portal to all CQU library guides including general subject/discipline guides, individual course assessment guides and database/resource guides. Students will be able to select the guide from a list, as a link from their online learning environment or as a link sent by a librarian via email. Each guide can display a librarian’s profile; include a chat widget for immediate synchronous response to queries at point of need; display interactive polls; have users rate resources or make comments; include web videos such as YouTube; show RSS Feeds and Podcasts; import Del.icio.us tag clouds; or save any LibGuides content to Del.icio.us. Librarians can effortlessly add links to websites of interest using the LibGuides browser button; insert dynamic scripts for web forms; catalogue search boxes or online databases search boxes (Springshare, 2007).
Librarians were given training in the creation of a guide and how to insert the various Web 2.0 technologies. Guidelines, created in the new guide format, were developed regarding appearance and the gradual introduction of Web 2.0 technologies. Chat sessions with individual liaison librarians, for example, would not be available from each guide; however, a Chat window linking directly to the virtual reference service would be inserted in the librarian’s profile. In this way students can still chat with a librarian and receive assistance while not interfering with the established virtual reference roster. This may change in the near future depending on librarian workloads.

As there is limited literature on how these technologies actually improve the delivery of information literacy to students, CQU Library wants to ensure each technology implemented provides an improvement to the service previously offered. Strategies for the evaluation of these services still have to be mapped.

**Examples of LibGuides for 2008**

LibGuides are currently being developed by all CQU librarians. Some early examples are the guides for Competence Assessment Scheme (CAS) - a re-entry program for nursing students, and HMSC11034 Study skills for Human Performance - a core first year course for the Human Movement Science and Occupational Health and Safety programs. The CAS guide was developed to provide broad assistance for mature age nurses who have been out of the workforce for over five years. The majority of these students have few information literacy skills, and require considerable assistance. In comparison, the guide for HMSC11034 provides assistance for a specific course assessment task that involves preparing an annotated bibliography.

Since statistical and anecdotal feedback shows that a considerable amount of time was spent supporting CAS students by phone, the librarians decided
that a discipline specific online guide would benefit these students. Difficulty transferring information literacy concepts from the generic tutorial, Compass, to locating nursing specific resources was identified as a significant problem. The CAS guide therefore needed to provide a learning path that would cover all aspects of information literacy required for academic study. None of the four courses undertaken by students had embedded or integrated information literacy in the curriculum and this was an added factor that was considered when developing this guide. A plan following the principles of Hypermedia Design Model (HDM), a cognitive learning model described by McManus (cited in Dewald, 1999 p. 27), was developed.

In line with the principles of HDM, the guide was developed with learners’ expected objectives in mind. The tabs across the top of the guide provide immediate navigation to the area of interest of the student; however the guide can also be worked through step-by-step as a tutorial. The introductory page details what each section contains, and allows guided choice. The Web 2.0 technologies being used in this guide include a widget for synchronous chat; polling to determine the value of the guide to students; feedback comments which will be moderated; ranking of websites of interest; and activities including interactive Flash demonstrations and simulations of online search techniques. Figure 3 is a screen capture of the home page of the CAS Guide identifying the Chat widget and poll.
In contrast, the course guide for HMSC11034 (Figure 4) has been developed in close collaboration with the course co-ordinator and Blackboard support staff. Students will be required to visit the guide and undertake specific tasks designed to assist in their understanding of the assessment topic as well as develop the skills required to complete the assessment. Progress to the next task will not occur until the previous one has been completed. The guide may be accessed from either the Library webpage or directly via the course website.

As this course will include students unable to attend the face to face on-campus tutorials, issues raised by students at these sessions will be incorporated into the guide and addressed by the librarian on an ongoing basis. Students will be able to register to receive emails when the guide is updated by the librarian.

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CQU librarians are also considering the development of a guide for academic staff which will demonstrate the capabilities of LibGuides at the same time as providing useful information on the Library’s information literacy initiatives for particular faculties. Librarians believe that using LibGuides as a communication tool will bring a closer collaboration with the university community and a better understanding of how the Library can help academics provide assistance to students at point of need.

**Future Directions**

There are a number of features available in LibGuides that are not currently under consideration at CQU Library. The librarians are taking a “go slowly” approach as they determine the pedagogical value of Libguides’ features.
Evaluation of how students use LibGuides will be undertaken in 2008 to ensure the guides’ objectives are being met. CQU Library is currently in the beginning stage of implementation and it is envisaged a number of changes will occur in response to feedback from academics and students and through formal evaluation.

The support staff at LibGuides is very responsive to technical queries and suggestions for improvement to the product. As of Friday 13 January 2008, additional functionality was made to LibGuides in response to feedback from librarians at various institutions. Some of the new features include: a new look to the LibGuides homepage, the ability to customise the header and footer of a guide, lock the look and feel across the system, the ability to assign editors to guides for quality control, apply a proxy URL to links on the page and access to a text version for screen readers. With such an innovative and responsive team behind LibGuides, this is a product to watch.

**Note:** The CQU Library LibGuides will not be publicly accessible until the start of Term 1, 4 March 2008. To view the guides online after that date, go to Library Guides on the CQU Library homepage at http://www.library.cqu.edu.au.
Bibliography


