

# Bringing the Library to Students: Linking Customized Library Resources through a Course-Management System

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## **Abstract**

An innovative approach to providing librarian selected, targeted library resources to students through a popular course-management system already in use campus wide.

## **Introduction**

Two facts of life in our current educational environment are combining to make teaching the use of library resources to college students an ever more challenging proposition. The first is their love of the Internet, and the second is the increasing use of course management software.

Students love to use general Internet resources for all of their information needs. Several recent studies including one from the Pew Internet and American Life Project<sup>1</sup>, indicate that these sources are highly preferred and used almost exclusively. As a result, students arrive at college with a familiarity with, and habit of, searching for their information needs through their favorite Internet search engine.

Couple this with the fact that in one of five college/university courses, students access course materi-

als through a course-management system (CMS)<sup>2</sup> such as Blackboard<sup>3</sup> or WebCT.<sup>4</sup> Most course management systems lead students to general Internet information resources, encouraging their belief that this is the place they should be going for their information. Other CMS's direct students to a commercial database that may be much less current and scholarly than library resources, and which the institution pays for through the course management system. David Cohen has highlighted the failure of CMS software to lead the students to course relevant library materials available through their own institution<sup>5</sup> Institutions of higher education purchase, through their libraries, quality scholarly materials to support student and faculty information needs, and yet these materials are bypassed by the CMS. To address this issue, Penn State has created two new tools for ANGEL, its course management software.

ANGEL, the open, flexible Enterprise Course Management System<sup>6</sup>, was developed at Indiana University and is now a product of CyberLearning Labs. At Penn State a collaborative project between four

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## *Bringing the Library to Students*

units in the University Libraries and Information Technology Services modified and developed the ANGEL code to create two new tools, Reserve Readings and the Library Subject Guides. This collaboration included library faculty and staff, an instructional designer, and both ANGEL and library programmers. The result is an innovative approach to bringing library resources into the learning and teaching environment by seamlessly linking the students directly to the most appropriate library resources for their course.

### **Reserves Readings Tool**

Students are becoming more and more familiar with the online course environment, and they do appreciate the pulling together of all the resources for a course into one virtual "place". They are notorious for wanting to waste as little time as possible. Every extra step they need to do in order to find information for a course becomes an annoyance. Although reserve readings are easier to find in the Penn State Library system than they previously were, students still had to go to the library web site, enter the online catalog, sign on to the system (authenticate) and search for their course by course number or instructor name. This presents multiple opportunities for failure and could result in the inability to locate reserve materials. In the Course Management Software environment, the course and instructor and student are already identified. Since electronic reserves are becoming a large part of our reserves business, this becomes even more important. The Reserves tool of the ANGEL Library section was designed to remove many of the steps the students had to do to get to their materials.

The process begins by the Instructor requesting Reserves through the standard library procedures. Once the request has been processed by the library staff, the instructor is notified of their availability, and informed of the opportunity to link to the reserves via ANGEL if they so desire. Instructors then need to enter their ANGEL course, go to their "Tools" section, and simply click on a link to activate the reserve readings in ANGEL. Students always see a "Tools" link on their ANGEL courses. Once they click on this tab, there is a section for "Library Tools" and this is where they will see a "reserve readings" link if it has been activated by the instructor. When the student clicks on the link, they are presented with a list of

their reserve readings. In some cases this may be a listing of a particular print item that they still need to retrieve in the library, but in many cases the links are to online reserve materials.

How is this accomplished? The ANGEL system sends the course number, section, student, and instructor information over to the library system. Penn State is a SIRSI Unicorn site and a search is automatically conducted in the reserves system for that course. The information is then returned as a regular reserves search into the ANGEL frame. The library system uses the data elements sent from ANGEL to authenticate the student, search the course number and the instructor, and generate a dynamic list of reserve reading materials. If a faculty member puts a new item on reserve through the library, it will immediately show up in the reserve list generated for students.

### **Library Subject Guides Tool**

Librarians at Penn State are subject specialists with responsibilities in collection development, instruction, reference, and liaison to related departments. Therefore, they are uniquely qualified to know their collections and the faculty's instructional needs. The goal was to create guides to library resources (appropriate databases, print and online reference resources, and web sites) that pertain to a particular course and/or department and make them automatically available to the students *through* the course via the Course Management Software. When fully implemented, each and every course taught through ANGEL will contain a librarian-created guide either for the department (e.g. Animal Science, Engineering, Anthropology, or Music), or for the specific course (e.g. Italian Renaissance Art, Peer Sexual Health Promotion or Kinetics and Industrial Chemistry).

To create their ANGEL guides, librarians are assigned a unique, specially developed level of access into the ANGEL system that allows them to create and link guides to all ANGEL courses. Once signed on, librarians have the option of using a flexible and customizable template (which requires no knowledge of html) or of simply linking to a web guide they have already created. Because thousands of courses use ANGEL, and the number is increasing rapidly each semester, the librarian has the option of linking multiple courses (i.e. an entire department) to a subject guide, or of creating a specific course guide. The guides

are being linked to the courses by the librarians as they are created. Links to the guides will carry over from semester to semester as faculty move their entire course. Of course, librarians can still work with faculty to link specialized resources to various units or assignments throughout the course.

When creating a guide with a template, the librarian can use default information already included in the template, can modify the information in any way, or can leave it out entirely. Links to appropriate databases are generated simply by selecting the database from an alphabetical list. Databases can be ordered by priority for student use, so the most appropriate database would be selected first, for example, Biological Abstracts may be listed first for biology courses, but other appropriate databases can also be listed. The system automatically creates a link to the URL for that database through the proxy server so the student will be authenticated and can enter directly. The template provides a number of standard headers, plus the ability to create new ones for specialized content such as statistics or government documents. Headers can be ordered in any way desired by the librarian. Contact information for the librarian, or for a service desk, normally would appear first in the guide, but again, this can be arranged to the end or to another location as desired by the creator of the guide. Links to virtual reference services and to individual records in the online catalog are also easy to insert. Once a guide is created, it can be linked to all classes for which it is appropriate. It can also be copied and modified for another class, so the librarian does not have start from the beginning when creating similar guides.

Once the librarian has linked a guide to a course, the teaching faculty member for that course and the students enrolled in the course will see the link to the guide on the "Tools" tab. Teaching faculty can request a customized guide from the librarian subject specialist if they prefer a more specialized guide to the one at the department level. Because the faculty is ultimately responsible for the content of their course, they may also remove the default guide from the student view. Instructors are encouraged to work with librarians in creating customized guides when appropriate.

Because students find the customized library guides on the "Tools" menu for each course, they can

rely on finding their library guide in a consistent location in ANGEL. They no longer have to remember what week of the semester their library resources may have been covered, or what assignment it may have been in, they can always find it in the "Tools" tab.

### Conclusion

The ANGEL library guide not only encourages partnerships between faculty and librarians where they may not have previously existed, but it also ensures that students have access to appropriate library resources at their fingertips, where and when they need it. Students also come to count on the fact that they can find and use the library tools in each course to identify appropriate information sources. Because of the "one stop shopping" aspect of tying library resources directly into the course management system, students will be less frustrated when searching for information, and more likely to use appropriate scholarly resources for their assignments. In the fall of 2002, after just two semesters of use, 3,444 sections (23%) were taught using ANGEL. With such strong growth at Penn State, we expect that future learners will use these guides as their primary portal into the academic information environment.

### Notes

1. Steve Jones. September, 2002. *The Internet Goes to College: How Students are Living in the Future with Today's Technology*. (Washington, D.C., Pew Internet and American Life Project). As of 01/06/2003 available online at: <http://www.pewinternet.org/reports/toc.asp?Report=71>.
2. The Campus Computing Project. October 2001. *Summary of the 2001 National Survey of Information Technology in Higher Education*. (Encino, Calif., The Campus Computing Project). As of 01/06/2003 available online at: <http://www.campuscomputing.net/summaries/2001/index.html>.
3. Blackboard Course Management Software: <http://www.blackboard.com/>.
4. WebCT Course Management Software: <http://www.webct.com>
5. David Cohen. May/June 2002. "Course Management Software: Where's the Library?" *EDUCAUSE Review*. 12-13. As of 01/06/2003 available online at: <http://www.educause.edu/ir/library/pdf/erm0239.pdf>.
6. ANGEL Course Management Software: <http://www.cyberlearninglabs.com/>.