What I’d like to do today is present a brief overview of a very simple but powerful application that was developed last summer at RIT libraries.

Before I begin, I’d like to mention that you will notice a few other names on the slide today. My role in this was really very minor. Jonathan Jiras, who is a Library Technology Specialist and Sue Mee who is the Library Coordinator for Distance and Online Learning, were the ones who developed this application and made it so successful. They couldn’t be here to present today, but I wanted to make sure that they receive the credit for what I think you will find is a very creative solution to a technical problem.
The Challenge

- RIT introduces new courseware: Desire2Learn
- Online Learning Environment:
  - Online course content – syllabus, readings, etc.
  - Online testing and gradebooks
  - Discussion groups and chat
  - Electronic submission of assignments
  - Group collaboration
  - Faculty create course pages for each course
- Visible library presence in tools used by faculty/students
- Limited “out of the box” capability for library integration
- Limited technical staff
- Short implementation timeframe

As I said, this application was developed last summer, in response to RIT’s introduction of a new CourseWare application on campus. For those of you who are unfamiliar with courseware, courseware has been popular on college campuses for several years, CourseWare applications create an online learning environment. They support online course content (such as syllabus, outlines, course readings, assignments, powerpoint), online testing and gradebooks, discussions groups and chat forums, and enable students to electronically submit homework assignments and collaborate on group assignments. Each professor can create this online learning environment for each course.

Courseware products present a big challenge for academic libraries—how to integrate library resources into this online environment and create a visible library presence in the tools that are used by faculty and students. Most courseware applications have limited “out of the box” capability for library integration and require local development

In addition, RIT faced the challenge of limited technical staff and a very short implementation timeframe. We received training on Desire2Learn in March and had to implement a solution by May so we only had about two months.
The Solution

- Library Resources Link Server
  - Similar in concept to an OpenURL Link Server
  - Modular, ColdFusion application
  - Integrates library resources, contact information, and course reserves
  - Resources are specific to the course, program, and/or academic department
  - Uses existing content, no new content development required
  - Seamless integration – no staff training required
  - Available by default in every course and from every Desire2Learn screen

We developed a very simple but powerful solution.

We created what can best be described as a “library resources link server”. This is similar in concept to an OpenURL Link server, but instead of linking to full-text when passed a citation, it links to relevant library resources when passed a course number.

Integrates library resources, contact information, and course reserves directly into the course page within Desire2Learn. Resources are customized, specific to the course, program, and/or academic department.

Because this uses existing content that was already developed, it requires no knowledge of Desire2Learn on the part of library staff. They simply maintain reserves in the online catalog or enhance existing web pages and information is seamlessly included in Desire2Learn.

It is available by default in every course and from every screen from within Desire2Learn. Librarians need no access to course shells, faculty don’t have to activate it.
Screen shot of a course page in Desire2Learn which has been branded as MyCourses by RIT. Along the bottom navigation bar and the right hand side, you note all the features of the courseware product: content, email, dropbox, discussions, grade book, quizzes, chat, classlist.
In the top navigation is a link to the cold fusion application “myLibrary”

We’ve called it myLibrary because RIT’s implementation of Desire2Learn is branded myCourses. It has nothing to do with the library portal application of the same name.

Every course, without exception, at RIT has a course shell – even if the faculty don’t use it.

The link is present by default in every course and from every page within that course.
Library Resources
Link Server

Course Number
Role

III Oracle Interface

Desire2Learn CMS
III Library Catalog
Library Website
Here is a graphical representation of the three systems and how the “library resources link server” integrates information.

When the MyLibrary link is clicked, Desire2Learn passes the course number to the cold fusion application as well as the role (student or faculty)

The linking application queries our online catalog via the Oracle Interface and sends back record information for individual items on reserve -- if they exist. It also uses the course number to generate links to existing content on our web server.

A dynamically generated web page is created – customized for that course number.

If there are items on reserve for the course, the webpage contains links to the individual records for material on reserve.
Users click the links and jump directly to the WebOPAC screen for that item.

The webpage also has links to the most appropriate library web pages for that college, program, or department.
Here is a screen shot after you click the link. Notice that the library resources webpage loads in the myCourses Frameset -- making it truly integrated into the course shell. Almost all the links pop-up a new browser window.

You can search the catalog, search the libraries website, and see a picture and contact information for the library subject specialist for that college or department.

If you click “my library account” it takes you to the patron screen at our webopac.

Clicking “Research Tools” brings up a page with links to bibliographic management software, citation guides, an assignment calculator, links to interlibrary loan, info about SFX, etc.

Note that there are “custom views” for specific types of patrons including faculty and distance learners with additional links advertising services just for them.

At the bottom, you will see 5 tabs. The first tab shows library reserves for the course. All reserves -- both electronic and traditional -- are listed. Library staff do not have to access course shells and insert these links. They are generated automatically for any course that has reserves. If there are no reserves for the course, the reserve tab does not appear, and the user sees only four tabs.
Here are cropped screenshots of the other tabs. The tabs above the black line are all program, department, or college specific and link to pre-existing librarian-authored web pages on the library web-server that list resources for that discipline. The course shell from which these are taken is an engineering course – so all of the resources shown here are related to engineering.

The application links to pre-existing content. Very little information resides in the application itself. It merely links to existing web pages. As such a librarian who supports a program, department, or college can continue to update and make changes to their pages as they always have without having to be concerned about the “library resources link server.” If a specific bibliographer creates new content for a department or program a link to it can be added to this application with just a few lines of code.

The find books tab -- under the black line -- is the same for all courses and presents links to our catalog, recent acquisitions, our ILL system, our ConnectNY System, and area library catalogs.
While we know that we can enhance this application, what I really want to emphasize is the simplicity of this solution. Even if you are not from an academic library or have no interest in courseware applications, I think that this is the most valuable point in this presentation. Not the application itself, but the approach that was taken. By focusing on what we could do with existing content and resources, we were able to develop and implement a very workable solution in less than 2 months with very little technical staff time. In addition, it required no additional training on the part of reference or reserve staff.

Future enhancements include

- We recently implemented an Electronic Resource Management System and will implement a Content Management System this year. This application could be enhanced to link to those two systems.
- Do additional customization so that in addition to special views for faculty and students, we might present special resources for graduate students.
- Promote it as a service to faculty so they can link to it from any course webpage or web site, especially ones that are independent of the campus courseware application.
- Turn into a database driven application so their can be even greater granularity of resources.
Rochester Institute of Technology

More information:
http://library.rit.edu/desire2learn/

- Flash video summary (6 minutes)
- PDF handout
- Screen shots
- Live URLs
- Sample code
- Web accessible recorded presentations

Much more detail about this project is available the URL shown.
- There is a 6 minute flash video summary.
- A PDF handout
- More screen shots
- Live URLs
- Sample Code
- Web accessible presentations with audio.