I titled this talk “We’re not in Kansas anymore” because of my initial reaction to using learning management systems and to reflect the fact that an LMS is definitely outside the realm of a traditional library system.
Who am I?

• Librarian
• IT department head
• Chair of Sakai Implementation Team

I was on the Electronic Resources Team at the University of Kentucky for 5 years and have been head of the Library/Information Technology department at the Libraries of The Claremont Colleges (more about them later!) for almost 6 years. This spring, I’ll be making another transition to Eastern Kentucky University.
What is an LMS?

• Web-based
• Online course content delivery
• Support classroom instruction as well as distance education

"Gym" courtesy Night Owl City

LMS - a (usually) web-based system through which course content is delivered online. Some courses are delivered entirely through the LMS; increasingly, the online course sites are used to augment classroom instruction. Learning management systems are also called course management systems.
Blackboard bought WebCT and plans to merge the two platforms in the future. There is also a rather infamous patent infringement suit currently underway, but I only know sketchy details. Blackboard apparently patented the idea of course materials being delivered online and now is trying to enforce that patent. Many in the higher education world think that this is just a tactic to eliminate competition.

I know little about Desire2Learn and ANGEL but have used Sakai extensively and have been exposed to Moodle (the conference site is done on moodle and is very cool!).
LMS Features

- Syllabus
- Assignments, Grade book
- Tests & Quizzes
- Readings, notes, other resources
- Discussion tools
- Chat
- Email (internal private messaging & listerve-like email)
- Web 2.0 tools: wiki, podcasts, blogging, RSS
- Student portfolios

Also student drop box/file submission, course schedule/calendar, site statistics, class roster, image slide show

Portfolios - the idea behind portfolios is for a student to create a body of work that is portable upon leaving the institution. The institution can create a framework for a portfolio around its core or general curriculum; students fill in the portfolio with coursework that meet broad or specific criteria, then reflect on how that work fits the criteria. Portfolios can be used for institutional accreditation, promotion/tenure, resumes, and in a variety of other ways. The Open Source Portfolio (OSP) toolset is built into Sakai.
There are several ways to integrate library content and services into online course sites:

Links to library web site, librarian contact information

Links to databases, journals (by subject even nicer); direct links to full text via OpenURL; embed federated searching or catalog search directly into course pages.

Electronic reserves (normally scanned by library staff); either placed inside LMS or linked to external (library-controlled) system

“Embedded librarian” - a librarian works with an instructor to create assignments that teach/emphasize research skills, participates in online courses in the forum, chat, etc.
These are the items on the previous slide charted according to effort required. Some things take IT staff effort, some take librarian effort. An assertion that I want to make here is that a higher degree of integration of library resources into coursework means greater benefit to students, but I have no data to support it (yet!!). Also, some courses simply would not benefit from library involvement (chemistry lab, for example) (although we librarians might find that hard to believe…).
The Claremont Colleges are a consortium of seven independent higher education institutions, with 7 presidents and 7 boards of trustees. Each institution pays into the budget of an organization called the Claremont University Consortium, which provides central services to all seven institutions, including a library system. Until 2006, each College was able to choose its LMS, and as a result, students had to learn WebCT, Moodle, Sakai or Web Crossing. The Academic Deans made the decision to support only one LMS in Claremont, and they chose Sakai. We are running WebCT for an additional year to allow for migration. We had a very tight and ambitious implementation timeline compared to other institutions using Sakai: in three months, we brought up the system and a programmer (the same person implementing the system) wrote scripts to interface with the largest Student Information system in town (Jenzabar, used by 5 colleges) to create an empty course site for each course being taught in Claremont.

Also somewhat differently than other Sakai institutions, we allow any Sakai user to create new project sites, something that has really taken off. Students can create sites for class groups or extra-curricular organizations, staff use it for teamwork, and staff, students and faculty alike use it to collaborate with colleagues at other institutions via user-initiated guest access.

A link to the library web page is added to every course site created. Digital library content via web tool (see upcoming slides).

Library resources FAQ & Training for faculty done by librarians.

RSS feed from Eres.
This is the main page for a bio-chem course at Harvey Mudd College. The library web site link was in the tools list at the beginning of the semester, but the instructor removed it from this lab-intensive course.

Here you can see several of the courses and projects that I am a member of, general information and announcements for the course, and all the tools available for this course. All the links between “Site Info” and “Help” are links to websites that the instructor has provided.
This is what a CCDL collection home page looks like when displayed in Sakai using the Web Content tool. Simple but elegant. The web content tool simply takes content from a URL provided by the site creator (instructor) and displays it in a frame like you see here. Can also choose to have the frame pop out into its own browser window.

To view our Digital Library collections, visit ccdl.libraries.claremont.edu. We use contentDM.
This is what the URL for a contentDM search results set looks like when added to Sakai using the Web content tool.

To glean a URL:
Go to http://ccdl.libraries.claremont.edu/cdm4/search.php and conduct a search.
Copy the URL of the resulting item set and paste into Sakai Web Content Tool.
It is possible to mark images in contentDM and then export an html page that points to all the images. This marked set is called “my favorites” (see next slide). Instructors can identify and mark images, then upload the resulting web page into the Resources tool on Sakai.

The other two items in the Content from the CCDL folder are simply links to web pages. Web links inside the resources tool open new windows/tabs rather than load inside a Sakai frame.
This is a “My favorites” file exported from contentDM. The thumbnail images link back to their respective records in the CCDL.
Docutek wrote a script that generates an RSS feed for each course on the fly (as it’s requested), so as new items are added, the list is updated.

The Sakai server is set up to be “trusted” by our ERes server. This means that students are not asked to authenticate to ERes under the assumption that they will have already authenticated to Sakai (and should only be seeing the feed by virtue of being a member of the course).

Each (Full Story) link opens a new tab/window where a user must first agree to the copyright statement then is presented with a link to the file on ERes. Some instructors do use the Web Content tool to link to their reserves--this preserves the “pretty” look of ERes but requires the authentication of the students via password.
Library FAQs

- Linking to collections, searches and objects in the CCDL
- Setting up links to ERes via RSS and web tool
- Creating links to databases, journals
- Creating links to full text via openURL
- Create a bibliography (in RefWorks) for uploading to Sakai

The FAQ, while rich in information, could be greatly improved by breaking it into single-topic, web-based guides with screenshots.
The Future @ Claremont

• Sakai use by library staff
• For library instruction
• Partner with faculty
• Horizon: ILS integration
  – RSS: book lists, journal lists, patron info
  – Federated searching
  – OpenURL
  – Encore?

Several library staff have begun using Sakai for various library projects. Most interesting to me is the Collections group’s use of the wiki tool to create a bare-bones ERM System.

The instruction librarians are interested in creating sites that contain tutorials and other library instruction materials. The reference librarians would also like to partner with faculty to see what resources and services they can provide to faculty and students from within Sakai.

Into the future, the libraries would like to send out RSS feeds to Sakai (and elsewhere of course); explore integrating federated searching into Sakai; expand the use of OpenURL links to library resources, and who knows what the future will bring?
There is a “library” role that each instructor adds to the appropriate course sites in Sakai. The library staff scans and adds files to the Resources tool (usually using WebDAV - a tool that allows you to add multiple files to Sakai instead of one-by-one). The library determines if each file falls under fair use, and requests copyright permission from the publisher if it is not fair use. Due to copyright restrictions they can’t always accommodate every request. This system will be reviewed in the future because it’s so labor-intensive (as is any electronic reserves system, I would argue).
Sakai is an open-source learning management system originally developed by U Michigan, Indiana, MIT and Stanford. The community of institutions using Sakai continually contribute to the development of its individual pieces. If you’re new to the idea of open source, the basic premise is that you don’t pay for the software and the changes that you make could be incorporated into future versions, but as a colleague of mine recently put it: “Open source software is free as in ‘kitten,’ not free as in ‘beer.’” Meaning that once you adopt an open source product, you are responsible for the care and feeding of it until the end of its useful life.

U Michigan and Indiana U were two primary partners in the development of a software tool called “Sakaibrary” which allows users to create citation lists on the fly via searches to the library’s federated search service. Each citation is linked back to the institution’s openURL resolver to facilitate quick access to the full text. Currently works with SFX openURL and Ex-Libris and Sirsi federated search engines. The presentation on the user end is relatively simple and slick, but the computing and programming effort on the back end has been complex and very time-intensive.
To create and add a citation list, click the Resources tool then click the Add link next to the folder in which the citation list should reside.
Add item types (other types are file upload, web link, html file, text file etc)
Add title and description
Search library resources or Create new citation to type cite manually.
Search for items

These are the resources made available to guest users; Actual UM users would see general topic areas (General Interest, Humanities, Social Science etc) in addition to library catalog (this list is set by the library).
I searched the Umich catalog for “harry Potter” and was presented with this result set. I can add any of the cites to my list, which is being built in another window, but unfortunately, the linked titled don’t do anything yet. Meaning, I can’t view further information about any of the items until I add them to my list. Not a problem for known items, but makes discovery of new items more difficult.
My main Sakai screen is in the background; the search and results screen in the foreground. As I click “Add,” the appropriate citation is added to the “Citations” list in the background window. From there, I can click the “Find it!” button to locate the item using OpenURL. The resolver used is determined by the user’s status (which Sakai knows). I am a guest here and so these findit links go to OpenWorldCat. Unfortunately, they go nowhere right now…
I can email to course participants (students) if I want; I can display this list to site members only or make it publicly available (but openURL links would only work for the appropriate folks.)
By default, Resources are alphabetized but can be sorted on the fly. In Sakai 2.3, Resources can be sorted as the instructor likes.

And, when I click on my list…
Newly-created citation list

…It opens in a new window (IE) or tab (Firefox).
Click an item’s title to view details about that item in this window; click the “find it!” link to view openURL search results in a new tab/window.
Dartmouth

- Dartmouth Center for the Advancement of Learning (DCAL)
- Blackboard Learning System 6
- Ref Packs
- Reserves
- “Courseware Integration Module”

Dartmouth’s Center for the Advancement of Learning is run by a faculty member and has a librarian (and others) on staff. They are a Blackboard campus though they also are looking at Sakai. Ref Packs is Dartmouth’s name for a Blackboard module wherein they create organized links to library resources in Blackboard, by subject. Users can add, remove and customize ref packs, but Blackboard is not yet smart enough to pre-populate a student’s ref packs based on the courses in which he is enrolled.

Programmers create framework for a new Ref Pack but the appropriate subject librarian is responsible for administering the module, which is done entirely through and easy-to-use web site.

The photo here was taken by me.

Reserves: Reserves are available from the catalog. Dartmouth hopes to automate the population of reserves into the appropriate Blackboard course; no additional authentication will be necessary.

Courseware Integration Module - allows Dartmouth to add a library catalog search box to Blackboard pages and allows pass thru of catalog results. Also allows pass thru of patron record information if patron logs in (holds, preferred searches, items checked out, contact info)
My guest account is pre-populated with several Ref Packs. Note the All purpose ref pack with a dictionary, encyclopedia, thesaurus, and other general ready-ref titles. I can:

Remove the instructions (How to use my research) once I get the hang of it

NOT edit the all purpose ref pack, though I can delete it.
A partial list of modules that can be added to “My Research” including RSS feeds from the NYT
To customize the RefPack for Sciences, I choose the sections I want to display, then click Submit.
RefPacks are meant to be a “ready ref” shelf. You can see databases, dictionaries, etc.
Embedded librarian

- Community College of Vermont
- Instruction for online students
- About services, not just resources
- *Educause Quarterly*, 2006 n4

The librarians at CCV saw that online-only students were missing out on library instruction and so came up with an online equivalent to their distributed, context-sensitive in-person instruction program.

A librarian works with the instructor to create assignments with a specific research component. Teaching research skills in the context of the course or even better within an individual assignment, is most effective.

Librarians create an "Ask a librarian" thread in each week’s discussion forum and a “research help” thread in discussion for the specific assignments. Librarians answer specific queries about what databases etc are appropriate for paper topics etc. Librarians also post tips about choosing resources, finding topics and citing research. (educause article).

Also important for the faculty member to encourage students to take advantage of the librarian’s expertise

Future: there aren’t enough librarians at CCV to provide embedded services for each course. They are looking at creating subject-oriented online courses for teaching research skills. They have also experimented very successfully with using video-conferencing technology to reach remote or online-only students.
Where you can start

• Make friends with IT (cookies help)
• Be an advocate for the library
• Collaborate with familiar faculty
• Think about instruction in new ways

These are broad strokes. For the more practical-minded…
No, really, where you can start

- Add library link to every course page
- Re-think reserves/document delivery
- Participate in a course:
  - Hold “office hours” in the chat room
  - Collaborate with instructor to create assignments with research component
  - Add links to related library resources
  - Start a “Research Help” thread in the discussion forum
- Harness technology (really, cookies do help!)
This is an image that I ran across on flickr when putting together a presentation on web2.0 tools for librarians. Crux is that there is a role that the academic library can play by filling the space at the intersection of social and academic spaces, both virtual and physical.

It struck me that a similar diagram could be constructed to represent the intersection of library services and courseware space. Hence....
Integrating library resources and services certainly fosters collaboration and creates community but ultimately it helps the students create knowledge. (the library is integral to the creation of knowledge in an academic environment!)

Eloquent (and subsequently zapped) definition of knowledge from wikipedia: Knowledge is the awareness and understanding of facts, truths or information gained in the form of experience or learning (a posteriori), or through introspection (a priori). Knowledge is an appreciation of the possession of interconnected details which, in isolation, are of lesser value.

So, you should ask yourselves: How can library resources and services (on the left) mesh with course material, teaching, faculty expertise (on the right) to help students create or gain knowledge at my institution?

The middle area is a combination of library services, resources and expertise and instructor expertise but it’s important to point out that the middle section as it appears here is couldn’t exist without BOTH sides.
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"Thank you" courtesy ARendle