

Where is the Library in Course Management Software?

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ABSTRACT

Course management software (CMS) or courseware products, such as Prometheus, FirstClass, Blackboard, and WebCT, do not include the Library as an essential, curricular component in their design. Consequently, the task falls to librarians to creatively partner with faculty to input library resources into courseware to support students effectively in their research endeavors. Distance learning students, who are off campus, will benefit as they are physically removed from the Library. Distance learners (DLs) can be intimidated by library websites and find it difficult and time consuming to navigate. Since the entire course content is in the course management product, the primary source for class information, it makes good sense to include library resources and services in the appropriate areas, such as the syllabus, assignments, projects, etc. Including research resources within courseware enables students to get started on their own in navigating the Library and can provide direct contact information to appropriate library staff for further and deeper resource assistance.

Rochester Institute of Technology's (RIT) distance learning (DL) students are located in many places around the world, as far away as Hong Kong or as close as living on the RIT campus. Students within 30 or so miles of the Campus prefer not to travel to take classes. These students share many commonalities, one of them is either they cannot easily or efficiently travel to RIT. Some on-campus students tend to prefer DL classes for the online environment and convenience. In the early development of CMS, the emphasis of providing an online venue was to reach DL students. Universities are discovering that a new audience is local students who prefer the online learning context (Machavec, 2001). "The lines between on and off-campus students and courses are blurring as technology is incorporated into all aspects of education" (Beagle, 2000). Students who are isolated and scattered around the globe do not have the option of asking questions and sharing information amongst themselves in person regarding related coursework questions. The framework that all RIT DL students share is the use of two CMS products, FirstClass or Prometheus. FirstClass is used solely for DL classes. Prometheus is used for some DL classes, but also for on-campus, online, and blended learning classes (face-to-face with some online components). The courseware encompasses an entire professor's course content, including the syllabus, lectures, projects, and discussions. When it is time to do research, write papers or create projects, DL students have to either locate information on their own or seek research assistance. Navigating library websites can be a time consuming affair, especially when resources are in an unrecognizable format, such as research databases, for which some students do not have a frame of reference. Since a majority of DL students are working and have families, they tend to do their coursework on weekends and nights when research help may not be available. Given this nontraditional profile, what can libraries, faculty, other university staff and CMS developers do to support DL student academic success within the parameters of using courseware?

Given the fact that courseware products are deficient overall in developing a built-in academic library component for student and faculty use, creative partnering with faculty is a good choice in assisting students with locating and learning how to use the Library. Librarians traditionally tend to work with faculty by purchasing suggested materials, teaching subject-specific classes, creating pathfinders, and doing research. In the online class environment that is structured within courseware, there are new opportunities and ways to present the required research information for students.

Students need general and specific library resources to be successful in finding course-related materials. On a continuum, some students prefer not to ask for research assistance and painstakingly search on their own, while other students like direct, detailed help. By presenting information directly in a courseware product, research assistance becomes a level playing field where all students are provided the same information to initially get started. Giving students more detailed research help in the form of a pathfinder is even better. DL students are grateful to have pointers and will sometimes email librarians to thank them and say how they wish specific research information had been supplied earlier in their academic

careers. How can librarians interact with instructors to achieve input of library-related information into CMS classes?

As librarians know, faculty own their own style and preferences in teaching. That said, there is no exception to the various ways that courseware is employed by instructors and the manner in which information is presented. Since there are multiple avenues for presenting library resources and services, it is best decided by faculty who teach a class as to how it fits their personal style. Librarians are knowledgeable regarding student information-seeking behaviors and what information is needed. They are experts in knowing when students are at the “point of need” in the information-seeking process to be aware of all resources to enable learners to be successful in their coursework. Libraries have also developed their websites so users can access their resources and services independent of time or location. Given the complementary expertise of both faculty and librarians to benefit DLs, it makes good sense for them to partner in furnishing the best and most useful resources and information available.

At RIT, two (instruction librarian and distance/online learning librarian) of the ten reference librarians teach Prometheus courseware classes in conjunction with the Online Learning Department, who sponsor the classes. The other librarians have a basic+ understanding of how the CMS works and how to use it. It is important for librarians to be knowledgeable about navigating and using courseware to solve occasional student questions and to work with faculty within the online class environment. Subject specialists are encouraged to offer library expertise in their respective topical areas to either input the information for faculty into Prometheus or demonstrate the resources for faculty to post the annotated links or other materials themselves. Some of the ways that RIT librarians have assisted faculty in posting information include: persistent links to e-books, writing and literature resources, librarian contact information, participating in monitoring and contributing to a discussion board topic on plagiarism, and other related topics. In the case of some courseware products, such as Prometheus, librarians can be added as Teaching Assistants with privileges to add or edit information.

An avenue that has provided guidance to RIT faculty on how and where to integrate library resources into an online course, was the development (and teaching of) a class within Prometheus by the Distance/Online Learning (D/OL) and Head of Information Delivery Services / Electronic Reserves Librarians, called *Integrating Library Resources Into myCourses*. The term, myCourses, was coined by RIT’s Information Technology Services department, so when RIT migrates from one courseware product to another, faculty and students will not be confused by a new courseware name. In this case, Prometheus is the product “under the hood,” sort to speak, of myCourses. The class is offered on a quarterly basis and was also proffered at the 2003 spring faculty workshop, the *Faculty Institute on Teaching and Learning (FITL)*, an annual event precipitated in May 1998 by faculty who voiced a strong need for support in learning the latest teaching and learning technologies. The FITL class had a good turnout, with enthusiastic attendees.

Faculty and staff have come to every class offered, but there has not been an overwhelming attendance. RIT librarians have found that faculty usually attend offered classes or contact them when they have a specific “point of need.” As an example, the RIT Library has used e-reserves since 1996. Many faculty are still not aware of the e-reserves service and are appreciative when they learn that such a service exists. Prometheus has an e-reserves template that instructors can use to request materials by filling out a citation for the item. If the Library has the article or book, the item is scanned and then posted wherever the instructor designates its location. If the Library does not own it, it is interlibrary loaned and then transmitted into the course. The demo class illustrates a model of how a course can best merge library information with the syllabus, the outline of weekly assignments, class projects, and lectures.

- Syllabus - provides contact information of the subject specialist by phone, email, or by live reference; Turnitin, a plagiarism-fighting tool will be utilized for students to upload their papers
- Outline of assignments – library research databases supporting research for assignments; a link to Information Delivery Services (interlibrary loan); live reference contact information; library catalogs; e-reserve readings; Syndetics ( button, that explains how to find full-text articles from an abstract or citation)

- Projects (writing a paper) – research database links; link to MS Word class; SmartForce learning modules that include MS Word
- Lectures – links to: online instruction guides on how to use research databases; the Research Tree that delineates how to do research at the RIT Library; citation formats; librarian-recommended resources by topic; Plagiarism - You Can Avoid It... tutorial; evaluating information from the Internet; career resources compiled by librarians

Because DL students are seeing library resources mingled with assignments and at other “points of need,” they are able to more easily locate the requisite information or contact their librarian if assistance is necessary. Students can spend more time directly researching and writing instead of perusing the Library’s labyrinth website, or worse yet, surfing the Internet for information that may not be authoritative or available. The Library will gain an increased relevance for students if they see its presence in the courseware.

Recently, a librarian who manages the faculty / staff Educational Technology Resource Room at RIT’s National Technical Institute for the Deaf (NTID), participated in a class, so he can support NTID faculty and staff who use Prometheus by using the demo class as an example. Garnering support of other university staff that foster relationships with faculty help spread the word of useful ways to incorporate library resources and services into a CMS. Even though every courseware has its own features, the ideas and examples here can be extrapolated for use in other courseware products.

Another valuable feature of Prometheus is its ability to create a Course Content Module. Modules allow faculty, librarians, or Online Learning (OL) staff to create a block of information, such as broad library research information, academic honesty/disability policies or another piece of information that can be shared among an instructor’s multiple sections or with other faculty. In an attempt to forearm DLs with basic to intermediate library guidance available in every Prometheus course, the D/OL Librarian created a Course Content Module, *Navigating RIT Library*.

The Module encompasses web links to doing library research, research guides and tutorials, librarian contact information and recommended resources by topic, **more!** -how to find full-text materials from abstracts and citations, E-Content Finder (a library-created tool to locate library full-text journals and books), library catalogs, and Information Delivery Services. Faculty have expressed positive comments regarding the Module that enables students to independently commence their research. Since Prometheus is also used for on-campus and blended learning classes, all students benefit from the module that was intended for DL students.

OL and the D/OL Librarian worked together designing how the Module would be placed in the syllabus. OL was careful to convert the Module into a format that allows faculty to maneuver it within the syllabus or even delete it, if so desired. The OL Prometheus administrator also set the Module to appear in every RIT course by default (all RIT courses have a presence automatically created in the prior quarter), another creative and useful way of disseminating information in a CMS product.

RIT DL students who use FirstClass courseware also benefit from library resources and services that are disseminated globally in a manner similar to the Course Content Module in Prometheus. Every quarter, OL creates an alias and serves out the Wallace Library Conference on all FirstClass course desktops. FirstClass has a different paradigm of presenting information than Prometheus. It is comprised of conferences and folders, two types of locations where faculty organize their course content. It also requires a client download (using the web-based version is discouraged unless behind a firewall or if traveling) and has a built-in email client. It is more robust than Prometheus, which makes it an excellent choice for DL faculty and students to communicate around the world. OL assisted the D/OL Librarian in setting up a course conference to delineate library resources in an easy to use format utilizing email messages where the subject line clearly states what information is within. DL students can quickly scan the subjects to find the information they are looking for. The messages are succinct and contain links to the requisite materials on the Library's website. There is a *history function* in FirstClass that provides the name, date, and time that a faculty member or student read a message. Some messages have been read by up to 200 users (during three quarters), a small percentage of which are faculty. DL students also reply to the FirstClass messages, therefore are able to directly contact the D/OL Librarian. Faculty and students have expressed appreciation of having a library resource on their course desktops.

The screenshot shows a web browser window titled "Wallace Library". The interface includes a menu bar (File, Edit, Format, Message, Conferencing, Connection, View, Help) and a toolbar with various icons. Below the toolbar are four main navigation buttons: "Ask Reference Question" (with a question mark icon), "DCE-VAX Acct Info." (with a folder icon), "Library Chat" (with a chat icon), and "Information Archive" (with a document icon). The main content area displays a table with 23 rows of information. The table has four columns: "Name", "Size", "Subject", and "Last Modified". Each row represents a message or resource, with the name "Marianne Buehler" repeated for all entries. The subjects range from software downloads to library services and tutorials. The "Last Modified" column shows dates from 7/1/2003 to 9/25/2003. At the bottom of the table, it indicates "23 items."

Name	Size	Subject	Last Modified
Marianne Buehler	42K	Downloading FirstClass & other software	9/25/2003 9:14 PM
Marianne Buehler	66K	DCE account info and activation	9/25/2003 9:10 PM
Marianne Buehler	67K	Full-text journal articles available	7/2/2003 1:33 PM
Marianne Buehler	34K	Connect NY	7/2/2003 1:32 PM
Marianne Buehler	34K	Writing Resources	7/2/2003 1:31 PM
Marianne Buehler	33K	Citation Formats	7/2/2003 1:30 PM
Marianne Buehler	50K	Ref. Librarians with subject expertise	7/2/2003 1:30 PM
Marianne Buehler	45K	Thinking Critically / Evaluating WWW Res	7/2/2003 1:29 PM
Marianne Buehler	54K	Scavenger Hunt for Online Learners	7/2/2003 1:28 PM
Marianne Buehler	44K	Welcome to the Wallace Library Conference	7/2/2003 1:28 PM
Marianne Buehler	50K	Full-text newspaper articles available	7/2/2003 1:27 PM
Marianne Buehler	57K	E-BOOKS - books available online	7/2/2003 1:27 PM
Marianne Buehler	44K	Why would I use Library Chat?	7/2/2003 1:26 PM
Marianne Buehler	47K	Online Library Instruction	7/2/2003 1:26 PM
Marianne Buehler	36K	Database PROBLEM REPORT Form	7/2/2003 1:22 PM
Marianne Buehler	46K	Copyright / Plagiarism info	7/2/2003 1:21 PM
Marianne Buehler	72K	Links to useful library resources	7/2/2003 1:20 PM
Marianne Buehler	61K	Direct link to Wallace Library homepage	7/2/2003 1:20 PM
Marianne Buehler	49K	Interlibrary loan is FREE to ALL students	7/2/2003 1:19 PM
Marianne Buehler	35K	Live Reference Help	7/2/2003 1:02 PM
Marianne Buehler	66K	Electronic Course Reserves	7/1/2003 9:35 AM
Marianne Buehler	57K	Course-specific online tutorials	7/1/2003 9:25 AM
Marianne Buehler	53K	Computer based training tutorials	7/1/2003 9:16 AM

Other DL and online students who may be using Prometheus are able to have web access to the Wallace Library Conference. Every time the D/OL Librarian updates a message in the Conference, it automatically updates the customized OL web interface in the Student Resource Center <http://online.rit.edu/>.

To accommodate a need for logging in using one password at a single authentication point, another customized feature developed for DL students has been the e-reserves component in FirstClass. The FirstClass Administrator created a Conference with permissions for students to access reserve readings within the Courseware. Students have the ability to read the material without having to login to the Library's e-reserve site and having to know another username and password. This has eliminated frustration for students and staff time spent providing e-reserve usernames and passwords. Partnering with the OL department has been an asset for the Library to be able to assist DL students in various venues, enabling them to be aware of available research information and the ability to find and use it.

“By integrating and linking the Library’s catalog and online databases [and more] into the courseware environment, students and faculty are only a click away from accessing many of the information resources relevant to their course assignments from within courseware” (Shank & Dewald, 2003). A DL student-centered research tool was created to be used in FirstClass as a library pathfinder. Every fall quarter, the D/OL Librarian emails all DL faculty as a reminder of library resources and services for their course. Also, new DL faculty are emailed every quarter with the same information. One of the services offered by the D/OL Librarian, is the creation of a pathfinder for specific classes. It is comprised of general information regarding using the Library from a distance. It also entails working with a subject specialist for a particular class, having the librarian compile specific resources that target the class syllabus. Once faculty express an interest in the pathfinder and when assembled, the D/OL Librarian, as a sub-administrator in FirstClass, emails the Library Assistance guide into the class. Many DL faculty have taken advantage of this service. If more than two DL students contact the D/OL Librarian from a particular class

who are struggling with navigating the Library, the professor is contacted asking if he or she would like a pathfinder to assist students in navigating the Library. OL Instructional Designers also recommend and refer DL faculty to consult with the D/OL Librarian. Many pathfinders have been created from those contacts. There has been positive feedback from students and faculty in using the library guides. If all faculty partnered with librarians to create a course library guide to resources, students would be less stressed and more successful in their research endeavors and assignments.

Partnering within our own institutions with faculty and other support departments, such as an Online / Distance Learning or the campus IT department is essential to create optimal learning environments that benefit students. In most university and college settings, one or more departments work with the courseware folks who developed the CMS product that is used on campus. At RIT, there is a Courseware Management System team comprised of OL, Information Technology Services, and RIT Library members. One of our tasks is to choose an appropriate courseware for RIT when circumstances necessitate a change. OL is the main contact to the Prometheus and FirstClass courseware support staff. RIT Faculty, staff and students have opportunities to provide functionality and usability courseware feedback by emailing suggestions or by participating in the annual spring distance learning survey. The OL administrators can make coding changes (Prometheus is open source) or request modifications for future version updates.

Libraries should play a discernible role in the evaluation and selection process of a campus CMS product (Beagle, 2000). Academic librarians also need to influence standards that include the library component, by determining ways in which CMS systems best use the expertise of librarians and library collections, both physical and online (Cohen, 2002). Overall, libraries have been absent in the design, development, and implementation of CMS. Consequently, faculty do not consider integrating library resources directly into their online courses. Authors Shank and Dewald (2003) believe that at a minimum, as faculty and librarians partner within a CMS, an instructor should at least link to a librarian's webpage. At a maximum, librarians can collaborate and assist in delivering the online class, with equal access to the courseware. The librarian adds customized links, leads chat discussions related to research, along with monitoring a message board with research-related questions throughout the term.

Many CMS companies have not incorporated an e-reserve system, a clickable library icon, or the library as a menu item that can be populated with research information or used as a pointer to more in depth library resources. The library is a missing element in most courseware products. Considering that a complete class is in a courseware environment, it makes sense to have curriculum research support placed in the same location for effective student use.

As an example of poor or lack of reliable resources, RIT used Blackboard (Bb), versions 2.0-5.0, until spring 2001. One of the obvious disadvantages of those versions was their rendition of a library component. It was a link that pointed to Bb-compiled informational websites that were not library-related. When CMS vendors point students to informational websites, some of which charge fees for their services, it is a concern of librarians because of the potential uneven quality of resources on the web. Without integrating the library into a CMS, will students be aware of or find expensively purchased or leased online course material? Librarians spend much time and their expertise collecting authoritative sources and organizing information that is best for student use. To amplify the Library's online offerings, the integrating of these resources is essential to get maximum value from institutional monetary and expert investments (Cohen, 2002). There may be hope in future CMS updates and versions of courseware products, as mentioned in Bb's "Product Overview White Paper." The Bb company acknowledges the "...critical role that Library collections play in providing valuable e-Learning content." The Paper goes on to add new upcoming library features such as, Dublin Core metadata tagging for unstructured content, an e-reserves component, courses will have the ability to include subject-specific materials, and manage library content within an online course (Oerter, 2003).

Universities and colleges need to encourage and put pressure on courseware companies to incorporate the Library as a prominent feature for faculty and students to have direct access to library resources and services. Including a library component will enable DLs and other online students to realize the importance of reliable sources and equate their academic research success with the Library that resides

in close proximity to where their courses are located. From a constructivist's point of view, integrating library resources and instruction requires faculty to work with librarians in designing and creating learning tools that take into consideration a learner's understanding and thinking processes in using information to complete assignments and projects (Macklin, 2003). In utilizing a campus CMS system, faculty and librarians can partner in providing the essentials for successful learning. By focusing on the interests of faculty and students who utilize the Library, librarians can succeed in producing and maintaining a relevant courseware presence.

Works Cited

Beagle, D. (2000, July). Web-based Learning Environments: Do Libraries Matter?

College & Research Libraries, 61(no4), 367-79.

Cohen, D. (2002, May/June). Course-Management Software: Where's the Library?

Educause, 37(3), 12-13.

Machavec, G. (2001, Oct.). Course management software: Where is the library?

Information Intelligence Online Libraries and Microcomputers, 19(10), 1-2.

Macklin, A. S. (2003, November). Theory into Practice: Applying David Jonassen's

Work in Instructional Design to Instruction Programs in Academic Libraries.

College & Research Libraries, 64(6), 494-500.

Oerter, L. (2003). *Blackboard Content System-Product Overview White Paper*, Retrieved

December 9, 2003, from

http://www.blackboard.com/docs/contentssystem/Content_System_wp.pdf.

Shank, J. D. & Dewald, N. H. (2003, March). Establishing our presence in courseware:

Adding library services to the virtual classroom. *Information Technology and*

Libraries, 22(1), 38-44.

