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A_FLIP to Courseware:
A Strategic Alliance for Improving Student Learning Outcomes
by John Shank and Steven Bell

Instructors expect students to access the best quality research resources available. Students, however, may be channeled to any number of non-library resources for a variety of reasons. In worst-case scenarios, students default to lesser quality electronic resources from free Internet search engines that are familiar, provide fast, less precise results, and require the least effort and the least critical thinking. In better-case scenarios, instructors use their courseware site to provide links to non-library resources, which students use to the exclusion of library resources. In best-case scenarios, instructors and librarians coordinate their expertise and energies so that students have access to high quality resources. Failing to achieve this coordination makes ineffective use of important and costly institutional assets: the library and its extensive electronic collections as well as librarians and their knowledge of the library's collection and resources.

To help students achieve the best case scenario, librarians, in partnership with instructors and courseware administrators, can utilize an institution's course management system to create a more direct path between libraries and classrooms. This paper introduces the Administrators, Faculty, Librarians Instructional Partnership (A_FLIP) model, which establishes collaboration between both librarians and courseware administrators through a systems approach and between librarians and faculty through a course-level approach. A_FLIP can support faculty efforts to enhance students' learning outcomes while contributing to the institution's ability to maximize the benefits of courseware products and library resources.

Collaboration and the Courseware Disconnect

The large body of information literacy literature confirms what librarians know from experience—there is a disconnect between faculty and librarians owing to several organizational factors. They may be circumstantial, structural, or simply a matter of faculty members' lack of time. Christiansen, Stombler, and Thaxton's review of librarian-faculty relations points to various reasons for the lack of collaboration, and the authors conclude that "in the eyes of faculty, librarians do not appear to play a central role in teaching or research" (2004, 118). Absent from their review are articles on course management systems and their potential to create a bridge between librarians and instructors. Our informal research and the model we propose evolve from an *EDUCAUSE Review* article that asks, "What can be done to get library resources—and librarians' expertise—into courseware development?" (Cohen 2002, 12). As Cohen points out, in the traditional model, librarians are disconnected from courseware; they partner with neither faculty nor courseware administrators to improve student access to quality information resources (Figure 1). However, courseware can be a valuable tool that helps librarians forge collaborative linkages with instructors and allows instructors to connect their courses to the valuable resources available in the library.

We conducted an informal survey of participants on two electronic discussion lists, one populated heavily by instruction and computing staff responsible for their institutional courseware (Exhibit 1) and the other by college librarians (Exhibit 2). While the responses were few (fewer than two dozen for each list), those received confirmed anecdotal evidence from our library colleagues—very little communication occurs between librarians and the information technology (IT) professionals responsible for courseware administration. Comments received from the institutional courseware list suggested that the responsibility for integrating library resources into the courseware was that of the librarians or the courseware system producers. The courseware administrators believed they were unable to contribute to library integration. Comments from the librarians indicated that integration occurs only when the library itself has administrative oversight over the courseware system. The schism between the groups' answers points clearly to a lack of

communication among librarians, instructors, and courseware administrators.

In the absence of collaboration, instructors may simply allow their courseware sites to become information silos—separate storehouses of information—instead of drawing upon the full spectrum of both library resources and free Internet resources. In some cases, too, students visiting such sites may be directed to information drawn from prepackaged resources supplied by a third-party alternative to the library (i.e., a database provided by a textbook publisher). While students may still find some useful resources in these scenarios, a key goal of information literacy is to help students become aware of the many possible information options and to develop the ability to choose wisely among them.

The A_FLIP model breaks down the silo environment by bringing the academic library into courseware at both the system and course levels, providing the necessary conditions for faculty to collaborate with librarians and courseware administrators to provide students with ready access to appropriate library content and services (Figure 2). By giving greater structure to such collaboration and promoting information literacy, this model can foster the most effective use of course management systems and library materials by faculty members and their students.

The Systems Approach: Courseware, Courseware Administrators, and Librarians

The systems approach in the A_FLIP model requires that librarians collaborate with the administrators, developers, and programmers of courseware to integrate a generic, global library presence into the software. Minimally, a hyperlink to the library Web site should be established. This enables students to have direct access to a broad range of common library services and resources within the course site. A_FLIP takes advantage of the scalability brought about by the integration of existing digital library services and resources with the management functions of courseware. Either a large university library or a small college library could accomplish this integration easily, allowing students quickly and effortlessly to move from their online course environment to the library.

The systems approach has been implemented in several ways. For example, one strategy involves librarians leveraging the versatility of courseware to establish their own courses designed to promote and deliver information literacy education (Exhibit 3). Once developed, such a library instruction module can be placed in courses across the system or be made centrally available, perhaps through a tab that connects to the modules. This approach enables librarians to develop expertise with the courseware so that they can take full advantage of it for teaching and integrating library resources. In turn, librarians should also work with information and instructional technologists to move beyond tutorials in the design of courseware. A more sophisticated approach would include working with administrators proactively to integrate the library into courseware by linking existing library resources and developing new ones for the courseware environment (Figure 3). Special user status can also be granted to librarians to allow them to access a course's functions and resources. These approaches save faculty time on task; librarians are able to perform the integration quickly and conveniently, allowing faculty to concentrate on instruction. In the grander scheme of the A_FLIP model, it is just such efficiencies for faculty, coupled with improving student access to high quality research resources, that will stimulate them to welcome librarian collaboration in courseware.

Librarians can also use tools built into their courseware systems or partner with IT colleagues to create custom tools. For example, the ANGEL courseware system has a library guide tool built into its software that allows a librarian to modify a generic Web template to create a new guide or to link an existing guide to the appropriate course or courses (Figure 4). These guides can provide students with direct access to the library's discipline-specific online databases and reference resources as well as the university library's online public access catalog. If these kinds of tools are not available in a courseware system, collaboration may result in custom tools. LinkMaker was created by Don Gourley, Director of Information Technology at the Washington Research Library Consortium, and Claire Dygert, Serials and Electronic Resources Librarian at American University, to make it easier for faculty to create durable or persistent links from Blackboard courses to articles in library databases. LinkMaker is unique because it is a custom-designed application for

Blackboard systems called a [Building Block](#). It is actually integrated directly into the courseware system and automates the process by which faculty can add the links from library databases into their courseware sites.

At the system level, simply creating a more obvious library presence through the addition of buttons that link to the library is an appreciated but ultimately inadequate gesture. Because the courseware systems constantly evolve, there will always be opportunities for new and innovative ways by which the library can be integrated across and throughout the system. For this reason librarians should have an ongoing role in the administration of the campus courseware system. The library director or other senior library administrator, for example, should serve on the institution's courseware committee. Doing so allows the library representation in decision-making related to the implementation of courseware features and enhancements. The most important reason to seek out the library's presence in the courseware administrative process is to preclude the acquisition of unnecessary resources that would duplicate or be inferior to existing library resources. This kind of involvement often takes a good deal of initiative on the part of the library director or dean as well as a clear plan or proposal for collaboration ([Exhibit 4](#)).

The Course Approach: Faculty, Courseware, and Librarians

The course approach of the A_FLIP model deals with faculty and librarians partnering to develop customized library resources for specific courseware sites. An important differentiation between the system approach and the course approach in the A_FLIP model is that the course approach is characterized by the provision of a bridge between a course and the library's content that is customized to the content of that individual course or possibly multiple sections of a single course. For example, at Philadelphia University the librarians and an instructional technologist created a unique RSS ([Real Simple Syndication](#)) feed for the library's weblog [Get It At Gutman](#). This RSS feed currently functions as system-level integration. It enables librarians to broadcast current news about the library on the course site announcement page, if faculty members have granted permission for this feature ([Figure 5](#)). (For more information on how to integrate RSS feeds into courseware sites, see the Teaching, Learning, and Technology Web site [Low Threshold Applications](#).)

This same technology, however, will soon be available for course-specific integration. We anticipate that in the not-too-distant future, many library databases will allow search results to be generated as RSS feeds. When that is possible, a librarian could structure a database search that would feed the equivalent of a constantly updated subject bibliography into a specific course site. A faculty member could request that the librarian conduct a search related to a topic being discussed in class, and the RSS feed would deliver a regular stream of articles related to that topic for student awareness. Working with faculty members, librarians could also capture RSS feeds from news sources and provide students with highly customized packets of news related to their course topics from thousands upon thousands of Internet resources. These are just some of the ways that integrating new and developing technologies such as RSS or social networking software into courseware promotes a collaborative approach to connecting students to the highest quality information resources.

While such strategies will be worth pursuing, the course approach need not require specific technologies. A more common course approach involves a teacher requesting a librarian (or a librarian soliciting permission from a teacher) to provide direct research assistance to students in a course ([Exhibit 5](#)). Librarian involvement may also be achieved by granting librarians special courseware user status. At Penn State University, for example, librarians are allowed access to various functions and resources of course sites. They can then achieve a deeper level of customization than is possible through the systems-level construct of providing folders composed of more generic library content. After the librarian consults with the faculty member, the former creates links to library resources as well as any additional non-library resources that best meet the information needs of the students ([Figure 6](#)). Instructors in turn are able to provide their students with direct access to appropriate library resources, such as online databases, reference resources, and Web sites directly from their courseware site. All campus parties benefit by moving to a consultative approach where librarians are more directly linked to specific courses, students, and instructors. Librarians develop a deeper relationship with both faculty and students, thereby gaining greater relevance and strategically placing

library resources and services where they are needed most ([Exhibit 6](#)). Faculty members gain customized resources for their courses and see improvement in the resources that their students use in assignments. Students get a context-specific, one-stop source for their research needs.

The challenge of the course-level approach is that it requires librarians to invest more time into each course. Librarians may be sought out for consultation by multiple instructors who teach dozens of courses and have hundreds of students, which may potentially create difficulties for many institutions due to staffing limitations. Because this course-level approach is only now emerging, there is no research to indicate what might be appropriate librarian-instructor course ratios. Also, the success of this model is dependent upon the extent to which librarians are given permission to access faculty courses and develop librarian-faculty partnerships in courseware. But the possibility of being overwhelmed by faculty requests for consultations should not discourage librarians from promoting the A_FLIP model on the course level at their institution. We believe that as librarians become more integrated into courseware at the course level, efficiencies in collaborating with faculty through the courseware environment can be achieved.

Conclusion

As librarians, we acknowledge that our large and diverse collections of electronic databases and journals can be overwhelming to both students and faculty. The resulting "options overload" creates a steep learning curve for our user communities. In our own literature and at our conferences, we regularly debate what can be done to enable and encourage both students and faculty to utilize our information resources more effectively. The A_FLIP model seeks to take advantage of the ubiquitous courseware environment to put the library and its collections (databases and electronic resources) in a central location where they can best support students' research activities. For this to be achieved, both the systems and course approach of the A_FLIP model will need to occur in a holistic manner.

In going beyond both the traditional model of librarians offering as-needed, outside-of-class student assistance and the one-shot model of a single library instruction session, the A_FLIP model promotes effective teaching and learning through the exemplary use of institutional resources. The potential challenges in implementing this model are far outweighed by its benefits:

- Students will gain a new ease and convenience in using library resources as well as having increased access and assistance from the librarian.
- Faculty members will save valuable class time and also have increased ease in communicating with the librarian.
- Librarians will gain increased access to students and instructors, which will lead to enhanced integration in the teaching and learning process.
- Courseware administrators will gain a new ally in promoting the advantages that courseware systems provide to faculty and students. The A_FLIP model will provide new ways to demonstrate that courseware does more than just transfer old teaching methods into an electronic setting and that it actually enhances the educational experience.
- Administrators will see that the conveniences created by using this model increase student and faculty access to and use of expensive resources purchased by the library.

Academic administrators are encouraged to support the implementation of this model, if not for the money it may save, then for the ways both instructors and students can save time on task. Certainly, there are conveniences and synergies that result from allowing all university resources to complement each other, but the most important advantage of all comes from the ability of students to achieve learning outcomes with greater focus and efficiency. For additional references, Web sites, links to courseware products, and more, visit our [CMS resource page](#).

References

Cohen, D. 2002. Course management software: Where's the library? *EDUCAUSE Review* 37 (3): 12-13. http://www.educause.edu/ir/library/pdf/erm0239.pdf (accessed March 31, 2006).

Christiansen, L., M. Stombler, and L. Thaxton. 2004. A report on librarian-faculty relations from a sociological perspective. *The Journal of Academic Librarianship* 30 (2): 116-121.

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