

Merging information literacy and technology through instructional and collaborative initiatives

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Every new generation of students coming to our campuses will have different and higher expectations for using and accessing types of technology. While college IT departments are responding by establishing wireless networks, implementing course management systems, and even providing iPods, students still struggle with effectively building their information literacy skills and merging these with the technology they use every day. The Digital Learning Collaboratory (DLC), a program and facility at Purdue University, encourages creative application of information literacy and technology to research and course projects. Active collaboration with faculty helps bridge the gap students have with information literacy and technology.

Most research projects have inherent aspects of information literacy and can be adjusted easily to enhance that focus. However, incorporating technology into a course or project varies as much as the content of the classes. We focus on the learning outcomes of the project and course to strengthen the information literacy components and to determine the best technology to use so it will enhance the learning experience not overpower it. The types of technology used range from basic scanning to graphic creation for web sites to short animations or multimedia presentations. Below are two examples which highlight the DLC's efforts in integrating information literacy and technology.

The instructor for a communications course, which focused on small group communication, wanted to provide a unique active learning experience for her students while mirroring a realistic workplace scenario. Since the class comprised mostly of technology majors,

she also felt it was important to appeal to their strong technical knowledge-base but at the same time fulfill the main course outcome: reinforcing the application of positive and productive communication behaviors.

At the end of the consultation session, the overall activity included two aspects: 1) the students had to conduct a group meeting using an instant messaging (IM) application and 2) construct a summary document about the meeting using email and the comments and tracking features within MS Word. Initially, the activity included the use of the white board and document sharing features of the IM. Unfortunately, the University's wireless network firewalls would not allow these functions and the instructor was reluctant to utilize a commercial service like Webex. The purchase of a university-wide site license for the program Breeze allows the inclusion of document sharing and white boarding for future classes.

The online meetings focused around a problem scenario presented to the students at the beginning of the class; students were encouraged to utilize online resources to support their arguments and decisions. The document included a summary of the meeting, the group's resolution to the problem, and a reflective piece about the experience. This activity focused on aspects of the ACRL Information Literacy Standards Three and Four, where students were encouraged to synthesize new knowledge through discussion and each group developed a summary document based on that discussion. The students used the IM and word processing applications in new ways, which increased their technology skills.

Teaching students outside of the classroom is also an

important component of the DLC's instructional program. A pilot workshop series was developed and tested during the 2004 Fall Semester. The workshop series was designed to be a blended information literacy and technology learning experience. The pilot outcome determined the need for such a series and the types of sessions students were interested in.

To create consistency and context to the individual sessions of the series, an overall theme, *Researching with Technology*, was picked. A general problem statement, which focused on the upcoming presidential election, was used as a starting point. A tailored, expanded problem statement reflected each session's specific learning outcomes. The series comprised of eight sessions and were titled and ordered as: *Effective Researching Strategies*, *Finding Full Text Articles*, *Advanced Google Searching*, *Using Quality Images*, *Creating Web Graphics*, *Developing a Web Site*, *Creating Multimedia Presentations*, and *Manipulating Video*. Advertising for the workshop series included posting an announcement to the DLC and Libraries web sites, displaying posters, announcing via the residence hall cable system, and sending email to faculty and staff contacts asking them to post and announce to their students. Due to facility limitations, registration for each session was capped at twenty. Even though all sessions had full registration with several students placing themselves on a wait list, actual attendance varied greatly.

An anonymous evaluation at the end of each session was used to assess the overall success of the program, examine the overall program timeline, check the order of the sessions, and look at any needed modifications to each session's the learning outcomes and content. We determined there was enough interest to implement the series with some alterations. Modifications to the series and individual course content varied. The changes for the 2005 Spring semester ranged from

slight title revisions for some sessions to completely reworking content in others. The biggest change was the number of sessions offered, which increased to three series (24 sessions) over the course of the semester. The intent was to provide students more opportunity to take each session. The use of a generic university-wide staff development registration system presented challenges in branding the series and reaching undergraduates. Continued use of this system as well as marketing efforts will be evaluated over the summer of 2005. A description of the current sessions can be found at <http://www.dlc.purdue.edu/workshops/descriptions.htm>.

Each new generation of students will come to universities and colleges with certain expectations for accessing hardware, software, and information. Programs and facilities like the Digital Learning Collaboratory can evolve and adapt to the needs and expectations of both students and faculty through effective collaboration, innovative programming, and keeping an eye on trends in both information literacy and technology developments.