TAKING ARTS OF ASIA ONLINE

By Katharine P. Burnett

Can online instruction be used at the college level to deal with increasing enrollments? At the University of California, Davis, with Andrew W. Mellon Foundation support, the potential of the Internet for reaching more students in undergraduate general education courses without increasing educational costs was explored. The author was one of ten instructors who participated in the project from 1999–2002. This article describes her experience teaching an Asian art history gateway course online, and the pedagogical outcome of this trial course.

GENERAL DESCRIPTION OF COURSE

Arts of Asia is a lower-division survey course offered once annually. Though always oversubscribed, course enrollment is limited by room size and teaching assistant (TA) appointments, accepting a maximum of about 100 students. The course content is broad, covering a 5000-year time span from the Neolithic to the contemporary for India, China, and Japan, plus a special unit on contemporary art of the Asian Diaspora.

The instructor believes that online technology has the capability to enhance learning opportunities for those who are economically, geographically, or physically disadvantaged. It would benefit ESL students who struggle with special terms and technical language, and students who fall ill and need to make up missed classes. It is good for all students to review material and reinforce concepts. It also frees the instructor from the tyranny of the textbook and inevitably dissatisfying photocopied coursepacks, enabling her to flexibly alter course content with relative ease.

One of the greatest worries in creating this course was the issue of image copyright. It plagues educators everywhere as we increasingly post visual images online. As the course uses over 1,100 slides from numerous collections worldwide, it would have taken a phenomenal amount of time, effort, and money to obtain publication permission from each source. The Mellon team determined that use of these materials was covered by fair use provisions of copyright law. Our initial solutions for respecting copyright included limiting access to the course Web site exclusively to students enrolled in the course by means of password-protection. The material was taken off-line as soon as the course was over. Security has since been upgraded by placing the online site within a course Web site available only to enrolled students, and then further password-protecting the online course.

If these solutions to the copyright problem prove inadequate, other options could be to put a disclaimer at the port of any online image use; or for museums to put high-resolution images of their collections online, and permit educators to create Web sites linking to these images (though this might be time-consuming and user-unfriendly); or for museums to permit educators to put their images online without fee, or for a nominal fee. Museums and collectors might find it worthwhile to develop a centralized permissions agency (like the Copyright Clearance Center, *http://www.copyright.com/*) for handling the details.

ONLINE ACCESS AND FORMAT

For the Mellon study, the instructor continued to present the course in the conventional manner using paired slide projectors, but added an online version as an option. Students could take either or both versions of the course, but all were required to participate in weekly TA-led discussion sections including East Asian painting workshops, and take all exams with the other students.

The online course is organized like a book, with the homepage providing a table of contents. Lectures videotaped in the classroom in Fall 2000 provided the content and soundtrack of the Fall 2001 online offering. Each online lecture consists of a series of numbered modules corresponding to lecture points. The resulting web pages show the images in pairs (comparable to using dual projectors) accompanied by the audio lecture, which the student may also read. The viewer controls the progression from one module to the next and is free to move back and forward at will. Examples of the Web site (with the copyright material removed) can be seen at http://cloudybay.ucdavis.edu/mellon.

STRENGTHS OF ONLINE INSTRUCTION

Having the text online along with the audio enables students with different learning styles to hear and read the lectures, and makes the course material more accessible for students with hearing disabilities, for whom English is a second language, or for whom the specialized vocabulary is unfamiliar.

The online version increases the potential for student-teacher contact. From within the online course, students can e-mail the instructor with questions about the precise set of images they are studying. When relevant, the instructor posts answers to all enrolled students through the course mailing list.

The course has become paper free. All course information including syllabus, examination information and grades, homework assignments, comprehensive lists of images, and announce-

ments are distributed electronically. Beyond the ecological benefits, it also has other advantages: students can obtain the information whenever they need it, it saves the professor administration time, and it saves the university duplication costs.

The online course makes it easier for students to prepare for exams and learn the material. The online version contains every slide discussed in class: not only the primary images, but also details of the primary and comparative images. Each slide was scanned at a very high resolution, with individual segments of each image incorporated into a zoom feature that floats on the surface of each image like a magnifying glass for closer inspection and analysis. As noted, each image in the online site is accompanied by lecture text. Students can access the full course at any time, repeating sections of lectures or whole lectures as necessary. Unlike film slides that gradually decay or can become lost, digital image quality is stable. The life of the slide collection is extended for use in upper division courses, seminars, and research.

STUDENT PERFORMANCE

The Mellon team used four measures to evaluate the effectiveness of the online version: student performance, their expectations and motivation for taking the class, their anonymous evaluation of the course and the instructor, and focus group responses.

A main concern of the project was whether students who relied on the online materials would perform as well in the course as those who came to class. Similarly, how would students feel about the alternative mode of presentation?

We had no control over the degree to which individual students availed themselves of the online material. As a group, the students who relied equally on lecture and online materials (10 percent) did less well in the course than the other two groups. There was no significant difference between the performance of those (73 percent) who primarily attended class and those (17 percent) who relied on the Web-based material. This information was obtained from students at the end of the quarter. It is not obvious why the students using both sources of information did more poorly. We have seen a hint of this pattern in two other courses in the Mellon project.

The Mellon team had lecture attendance records for twelve class sessions, and server records indicating how often each student logged on. The attendance data were a better predictor of performance than the number of logons. The beneficial effect of class attendance may account in part for the lower performance of the "about equal reliance" group. The high attendance/low logon students (above the median for attendance and below the median for number of logons) did better than the low attendance/high logon students. The difference is that between a B and C+. Those who relied heavily on the Web presentations performed as well as those who came to class.

At the beginning of the course, students were asked their reasons for taking the class. Key motives were interest in the subject matter, and meeting university and major requirements. The tug of technology for learning was slight, with few desiring an online course or anticipating that the online course would improve their computer/internet skills.

In anonymous evaluations, students gave the course and the instructor the same overall high rating; there were no differences related to Web use. The evaluations were almost identical to those for the conventionally taught course offered in Fall 2000.

The Mellon team also ran two focus groups. Neither the instructor nor TAs were present. The comments were similar to those heard from students in other project courses. Students almost universally agreed that although the Web/CD-based course provides as good an education in Asian art history, the in-class lectures provided them with better preparation for the exams. Here are some characteristic verbatim comments:

I prefer an in-class lecture because if you can listen to a professor, you will get an idea of what they want more than if you just went off the Web and read everything.

I don't think I would do as well if I was just on the Web. The little things she adds (in lecture) have really helped me.

I don't think it matters if you are in lecture or online as long as you are doing the reading and paying attention, you should be able to figure it out. I don't see why you couldn't do as well on the midterms with the online versions. It just depends on how well you study. She drops subtle hints (in lecture), but it's not like she gives away secrets in lectures.

I thought it was helpful to have the audio with it because I'm an audio learner. It's not as good as the actual lecture, but I think it could be.

A main concern of the project was whether students who relied on the online materials would perform as well in the course as those who came to class.

Analysis of the instructor's online daily time log compiled nine months before class to the end of the ten-week quarter reveals that she felt the traditional course took 118.5 hours more in direct time than the online version.

The focus group participants stated that the Web/CD provided a good supplement, but they needed the live lecture to keep them motivated. Most felt that they lacked sufficient motivation to take a course in art history using just Web/CD presentations.

For me, it's a personal thing. I need the in-class experience, hearing the professor. I don't sit in the front row; I sit in the back. For me it is much more ingrained if I go to class.

Because it is Art History, I really like having something online, pictures and such, especially for a class like this where they don't have all of the pictures in the book. Half the stuff she gave on art in China is not in the book.

The online stuff was really helpful to me, because I had to work during one of the lecture times. And so it was really good to have that there. But at the same time, it was too easy for me to procrastinate.

I'm going to class but spending a lot of time online. I don't have any problem with motivation to go online. You do postpone it, though.

All agreed that online practice tests would be helpful in reducing procrastination, and these have been developed. Another complaint against a virtual version of the course concerned the ability to get questions answered. (Author's note: Although each module has an e-mail link that permits sending questions directly to the instructor, this feature was not used by any of the students.)

From a student point of view, online features are a valuable supplement. Students find the course burdensome because they feel they have to memorize a large amount of material. (Though most lower-division courses typically demand memorization of basic information, the memorization of visual material is an unfamiliar challenge to many students.) When they miss class, it is difficult to reconstruct the material from readings or friends' notes. Having the slides and lectures online solves that problem.

THE BOTTOM LINE

We incurred about $19,000 in administrative costs in creating the online course:

Programming:	629 hrs.	$11,190
Staff (transcription, pulling slides, etc.):	565 hrs.	$7,345
Project Administration:	20 hrs.	$700

Note that if fair use provisions did not apply, there would be additional charges for copyright permissions.

Analysis of the instructor's online daily time log compiled nine months before class to the end of the ten-week quarter reveals that she felt the traditional course took 118.5 hours more in direct time than the online version. "Direct time" was that spent on the specific course. "Indirect time" was time spent on less-directly-related activities such as general reading, collecting useful materials, or attending seminars and conferences. Overall, the online version took 140.5 hours (of direct and indirect time) less than the traditional one.

For this regularly-offered course, the potential exists for a cost savings to the institution. Putting the entire course online would allow the instructor to use former lecture time to engage with the students differently, perhaps by meeting with half the class on each of the regularly scheduled class days for discussions rather than lectures, thereby redirecting much of her preparation time to producing research publications. Potentially the online version of the course could be offered repeatedly during the year with faculty supervision of TAs for discussion groups and grading. More students could be enrolled, though it would increase the number of teaching assistants necessary for leading discussion groups and grading papers and examinations, and the TAs would have to be at an advanced MA or PhD level. These demands, along with the initial preparation time, need to be considered in calculating the costs and savings of Web-based instruction. The Mellon team members do not feel that is it appropriate to completely remove faculty participation from the online course.

Lurking in the corners of the issue of online learning is the awareness that an honest and clearly articulated position must be made regarding an institution's commitment to its faculty and students. When push comes to shove, what does a college or university really expect of its faculty regarding teaching? What truly constitutes excellence or institution-approved adequacy in teaching? What constitutes excellence or adequacy in learning? What can students reasonably expect from their collegiate learning experience?

For that matter, is the creation of an online course the equivalent of writing a research text? of a textbook? How much should it count for faculty merit evaluation and promotion? Who owns the copyright to the course material? Though in this instance both the instructor's name and the regents of the university are listed as copyright holders, can the university offer the online version without the instructor's permission? Can the instructor offer the course at another institution should she leave the university?

In answer to the question posed at the beginning of this article "Can online instruction be used to deal with increasing enrollments?" the author's response is affirmative. Her response is even more enthusiastic when instruction is a hybrid of online learning and in-class discussion and activities. The Mellon team was able to construct an online version that is reasonably comparable to the traditional lecture with regard to student performance and evaluation. With the help of student input, we can improve on our first effort. The problem of student procrastination with Web-based presentation remains, but is certainly not something exclusive to Web-based learning. Although a considerable amount of time and resources went into constructing the online modules, subsequent costs for updating material will be considerably less. The instructor anticipates that course preparation will require less of her time in subsequent delivery. Increasing the size of the course may require an increase in staff time devoted to communicating with students, running discussion sections, and grading examinations and papers. Still, there is the potential savings of not having to construct additional classrooms at a time when swelling undergraduate enrollments and state budget cuts are putting constraints on operational costs.

HOW TO DO IT BETTER

This was the Mellon team's first attempt to create an online Art History course. We learned much and are taking steps to improve the course. For example, we need to facilitate navigation among the hundreds of slides so that they are more accessible for review. In the first edition of the online course, the lectures and informational modules were simply numbered. The revised edition has titles for the lecture modules yielding easier access and an online glossary so that pop-up boxes bring up definitions on demand.

An easier and more user-friendly procedure has been developed to access and navigate the Web site. The quality of the online slides has also been improved. Students complained that they were too small and that the zoom images were blurry. The images had been scanned at high resolution but digitized at low resolutions to reduce download time. This was a mistake. Art objects need the highest possible quality resolution.

CONCLUSIONS

Given the ease with which students could have justifiably skipped class and gone directly to the online version, the professor was surprised to see (roughly) the same percentage of students in attendance as during previous offerings of the course. She was gratified to learn that student comments indicate that they learn better with a live instructor.

A major unanticipated benefit was having the slides digitized, though this benefit, too, is compromised without copyright permissions. As is probably the case for most art history courses, the instructor spends an inordinate amount of time finding, pulling, and replacing (film) slides for the carousel projector. Now she has an electronic archive from which she can quickly and easily lecture, or rearrange into digitized presentations. She no longer needs physical access to the (film) slide collection for this set of images.

As a result of participation in this study, the instructor discovered the pedagogical advantages of online teaching, and expanded her ideas of how to teach and how students could learn better. She now feels that hybrid courses can present optimal learning opportunities for lower-division students. The instructor can control the information learned by requiring students to study the course material online just as they read assigned texts at home, and use contact hours for discussion and student presentations in which students take fuller responsibility for their learning. ■

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ACKNOWLEDGEMENTS

This study was funded by the Mellon CEUTT Initiative (Cost Effective Uses of Technology in Teaching). The author received an additional Undergraduate Instructional Improvement Program award for this study from the Teaching Resources Center, UC Davis. Thanks are expressed to them and the University of California, Davis, for their financial support.

The author wishes to acknowledge the assistance of colleagues at the University of California, Davis, with this article. Barbara A. Sommer, Co-Director of the Mellon Project, and Lecturer, Department of Psychology, contributed information on the surveys of performance and evaluation analyses. Curt Acredolo, Former Associate Adjunct Professor, Department of Human and Community Development, supplied information about focus groups. Michael Maher, Professor, Graduate School of Management, provided time sheet and cost analyses. Harry Matthews, Former Director, Mediaworks and Professor, Biochemistry Department, was the Principal Investigator and Co-Director of the Mellon Project.

The author wishes to thank Nila LaVanaway for transcribing lectures and managing the slide selection procedures during the study. Thanks are also expressed to the Information & Educational Technology Mediaworks team at UC Davis for designing and formatting the online presentation, and to Leah Theis for overseeing the slide management for this project.