

Distance Learning - The LII's Experience and Future Plans

"Much of the commercial hype and hope about distance learning is based on a very unidirectional conception of instruction, where teaching is merely presentation, and learning is merely absorption. The Open University's experience with two million students over 25 years suggests that such an impoverished notion of distance education will fail -- or at least have massive drop-out problems."

-- Sir John Daniel, Vice Chancellor, The Open University

I. The LII's First Distance Learning Venture -- 1996-1999

A. Administrative Arrangements

For three years, Cornell Law School's Legal Information Institute (LII) offered a distance learning course to students enrolled at four participating law schools. The participating schools were, in addition to Cornell, the University of Colorado, the University of Kansas, and Chicago-Kent College of Law. The course was approved as a part of the curriculum at each of the participating schools and for purposes of the course its teacher, Professor Peter Martin of Cornell, was an adjunct or visiting member of the faculty of the other institutions. Each of the schools handled the administrative details for its own students. Students registered for the course with their home institution, examinations were administered there, and grades were assigned in accordance with the grading norms and procedures of each of the schools. Cornell Law school furnished the course, through the LII, and each of the other schools paid a lump sum of \$5000 for it (an amount set to approximate what law schools often pay an adjunct faculty member covering a specialized area). All instructional and student evaluation responsibilities were carried by Prof. Martin. Martin made one visit to each of the participating schools several weeks after the course had begun to conduct a face-to-face meeting with all the students and to uncover and resolve any issues of course procedures or expectations on their minds.

The participating schools were also responsible for providing a classroom with the necessary computer and network connection, a technology person capable of setting up the videoconference software on that computer and troubleshooting any problems, and an administrative contact person. Because the course included regular sessions in a classroom at each of the law school sites, ABA accreditation standards for resident education were met. (The scope of the temporary guidelines governing distance education issued by the ABA during the second year of the course is far from clear. Since those guidelines seemed focused on courses delivered to students away from law schools, particularly to students where they live or work, the participating schools concluded it was not necessary to obtain ABA clearance for this course.)

B. Course Content and Aim

The content of the course was copyright law, in its application to digital works. Distance learning can be viewed as a solution to many different "problems". The problem at which this particular course was aimed was the limitation on important upper-class electives resulting from the lack of match up between faculty expertise and teaching interests and a critical mass of students within a single institution. Using the Net, this course framework allowed all four schools to provide an advanced upper-class offering that no one of the participating schools could reasonably mount on its own -- because of a lack of faculty expertise, sufficient numbers of interested students, or both.

C. How Net Technologies Were Mapped Against Conventional Law School Practices

The course was constructed and carried out using a set of "off the shelf" Internet tools and technologies. All of the assigned readings were placed on the Net, at the LII web site. (The most recent version of the course still resides at: <http://lii.law.cornell.edu/ecourse/>) Those readings were posted, along with a set of questions and often a problem scenario, at the beginning of each course unit. (Units corresponded roughly to a week.) A Web-based conferencing environment provided the means for discussion of the assigned material, generally in the context of one or more problem scenarios. The particular conferencing software used changed from year-to-year as the options evolved. The most recent choice was WebBoard. This medium of written exchange was used in fairly typical Socratic fashion by the teacher. A day or two after posting of the unit's reading assignment, the teacher would lead off discussion with a question. Since, in such an asynchronous discussion, multiple threads can be sustained at once, the teacher would often

initiate a second or even third line of inquiry before the first had come to rest. This Web-based written exchange led up to a culminating "real-time" videoconference class, which brought the unit to a close. Twenty-four hours prior to that videoconference, the teacher sent an agenda to the entire class by e-mail. This agenda built on the class discussion carried out in the WebBoard conference, laid out the sequence of principal questions to be pursued in the videoconference class, and identified the schools to which each of those questions would first be addressed.

The videoconference session was conducted using "desktop" conferencing software. The use of such low bandwidth technology put participation within the reach of all the schools, indeed, within the reach of most U.S. law schools. It required only that the participating schools have a classroom with an ethernet connection and a multimedia-capable computer connected to both a microphone and a digital camera. The LII ran a reflector on one of its servers that enabled all five sites (the teacher's office and classrooms at the four schools) to see and hear one another. The discussion was led by the teacher who called upon students at one site and then students at another. The videoconferencing software (CUSEEME) included a keyboard chat window which was available for use by students at one site to indicate a desire to respond to a point being made by the current speaker or to signal their failure to understand. The teacher ran an audio tape recording during the entire session. This provided a backup for those occasions when one of the sites lost its videoconference connection. (When one of the sites did get cut off, the established course procedure called for the students at that site to conduct their own discussion, following the agenda for the week, and to post a summary of their conclusions to the course WebBoard. A written summary or digital audio files prepared from the audio tape of the discussion carried out by the other sites and teacher was, in turn, available to those at the disconnected site.)

In addition to these asynchronous written discussions and weekly videoconferences, the students at each of the participating schools were instructed to schedule one local discussion session a week with one another.

Each of the years the course was offered it included an additional written project. The ultimate form this element of the course took was a position paper on one of a list of current issues or proposals for legislative change within a scope of the course. Each student had to prepare a three page essay on the topic and present their views to the rest of the class during one of the videoconference sessions.

D. Course schedule

Because of the different start times and different vacation patterns of the four participating schools, it was not possible to fit a three credit semester course into a single term. Consequently the course began in the fall semester, took a recess before the fall exam period, and resumed in late January, ending with an exam in early March. Topic assignments on individual position papers were made before the long December-January break, with those papers due at that break's conclusion.

The course concluded with a conventional exam, prepared by the teacher but administered under the groundrules of the respective participating schools. In order to allow full use of the digital materials with which the course had been carried out in the examination, the exam was administered as a "take-home" exam in the three schools that did not otherwise permit use of computers in taking exams.

II. The LII's Future Distance Learning Plans

A. Some Initial Choices

As those who are longtime distance education practitioners point out, often with some irritation, distance education has a long and honorable history. Despite that history, the explosion of digital technology has truly redefined the field. Distance education is no longer limited to what can be accomplished with printed materials, audio and videotapes, submission of assignments by mail, and broadcast lectures. Ubiquitous access to the Internet, with its multiple modes of interaction and its capacity for on-demand delivery of audio, video, and programmed exercises, creates a very different set of educational opportunities. As a recent College Board Report explains:

[It is now possible] to transcend barriers of time and space in ways unimagined only a few years ago. Almost anything - text, data, images, video, audio - can be delivered electronically, almost anywhere in the world, almost any time and in real time, over the Internet. Imaging and Web-based technologies are also

constantly enhancing the potential for two-way communications between and among teachers and students in remote locations.

The resulting new opportunities can be organized and analyzed along several dimensions. They can be categorized according to the technology that they deploy (high-end versus desktop videoconferencing, synchronous versus asynchronous exchange), the audiences or markets they are designed to reach (degree seeking professional students (JD or LLM), students of other stripes with some interest in law, lawyers in need of continuing education, other professionals or citizens seeking an introduction to some law topic, not a degree, and so on), the educational approaches they embody (lecture, self-study, teacher or computer mediated tutorials and exercises, and so forth).

Each of these dimensions, of course, has implications for the others. The choice of technology, for example, will affect both the available audience and educational approach. Since an economic concern underlies much of the interest in distance education, the factors of revenue and cost also lie close to the surface.

The LII's investigation of distance education and its future plans have been premised upon several judgments about these factors. First, we have been interested only in those technologies that are widely "accessible" at low cost. Second, we have focused on pedagogical methods that reflect the traditional law school interactive teaching paradigm. Third, we have proceeded with the conviction that so radically different an educational environment requires substantial rethinking of established methods -- especially if one is aiming for a model of distance education that can be both replicated and scaled.

B. A Common First Step That We Have Not Taken

A widely practiced form of distance education represents a simple extension of conventional classroom practice through high-end videoconferencing technology. Classrooms at more than one location are linked to permit a teacher at one of those locations to lecture or conduct more elaborate presentation for students who are assembled at the same time in all the linked locations. With additional investment in technology infrastructure those additional students at distant locations can participate in discussion, with questions or comments. The principal advantage of this mode of distance education is that it requires very little adjustment of practice or expectation on the part of either teacher or student. It can also be used to create highly diverse collections of students (students gathered in classrooms in different countries, for example) and can link faculty members with students they might otherwise be unable to teach.

The drawbacks of this mode of distance education include its high-cost at both the sending and receiving end and its requirement that faculty and students assemble in "real-time." The latter can become increasingly problematic as sites are linked across different time zones.

The LII's future distance education initiatives will build on its experience using a mixture of less costly technologies, and patterns of instruction that make substantial use of asynchronous exchange.

C. Our Next Steps

Our first distance learning course was a success in the limited sense that it answered the question: "Can a teacher assemble a critical mass of students across multiple institutions and, using off-the-shelf Internet software, effectively deliver an upper level course to law students?" The answer is yes. Over this three-year experiment, we developed a recipe for doing that. It is a recipe that calls for both significant adjustment in pedagogy and a continuing level of teacher innovation and risk taking. Those requirements plus a strong sense, widely confirmed by the experience of others in the distance learning field, that a ratio of 1 teacher to 30 students is close to the outer bound for effective online interactive exchange yield a conclusion that this particular model of distance education cannot easily be replicated or scaled.

Our next distance learning ventures will seek to surmount those limitations.

Peter W. Martin - Dec. 1999

