

A Cornell (LII) Playbook

Designing and Constructing a Distance Law Course (or Set of Course Components)

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Step 1:

Begin with a multi-year plan, backed by adequate institutional commitment.

See:

LII Distance Learning Options Playbook (available upon request) and the LII Playbook on Marketing, Conducting, and Administering an Inter-School, Internet-Based Course:

http://www.law.cornell.edu/background/distance/codec/04 conducting playbook.pdf

Comments:

For both the faculty members involved and the offering institution successful distance education entails major investment – under such headings as course design and construction, staff support, technical infrastructure. That investment can only be justified in terms of expected returns (financial and other) over a several year period. This calls for a longer range plan (and commitment) than the typical law school decision to add a new course to the curriculum or a law teacher's decision to revise her approach to a course.

Step 2:

Create a detailed record of the course as currently offered, focusing particularly on how classroom time is used, day-by-day, throughout the term.

See:

For background: LII's 2001 report to ABA (Attachment A)

Comments:

This playbook assumes that the design and construction process begins with an established and successful classroom-based course. This furnishes, among other things, a useful benchmark. It allows the nature and amount of assigned readings, the goals and agenda, the cumulative workload for students and other key parameters for the course in its revised format to be calibrated against past experience.

The conversion of some or all of the work previously carried out in the classroom to a distance format also calls for detailed review of exactly how class meeting time has been used.

The best base for such a review is a full audio or video capture of the complete set of classes.

Step 3:

Break down the principal classroom activities according to categories or modes of teacher-student, student-student interaction.

E.g.:

- Teacher presentation
- Questions and problems designed to force students to express and apply the concepts, knowledge, and so on of the unit
- Points of accountability that provide incentive to complete assignments on time
- Opportunities for student-student exchange exploring different viewpoints, the complexity of issues, etc.
- Means for revealing and enabling the teacher to respond to student confusion
- Feedback on prior student work

Comments:

Converting a course to a different format calls for a level of reflection on exactly what we do in the classroom and why that few of us routinely bring to our teaching methods.

A useful first separation is between presentation and interactive elements. Disaggregating interactive class portions according to purpose can and should follow.

Step 4:

Tentatively map those activity categories (or the subset you plan to convert for distance delivery) against currently available/affordable/accessible technology options.

See:

A sample topic from Social Security Law: http://www.law.cornell.edu/socsec/course/topic04/ (Appendix B)

Comments:

The means currently available (and affordable) to the faculty of one school may not be to another so choices for the same function may well vary. Available and affordable encompasses amounts of technologist and educational consultant time available to the project. (What educational consultant and why?)

Accessibility is an issue for both faculty and students. It will be as important for the students as the teacher for there to be clarity and consistency about what to expect from each form of interaction.

In most institutions the selection of the most appropriate technology options for various purposes will require an iterative, experimental process involving the course creator and one or more collaborators.

Step 5:

Consider the preferred and likely alternative conditions of student use as well as the technology available to the course creator and course teacher before committing to a final plan.

E.g.:

- One or two students at a networked computer
- One or two students at a computer that need not be online
- One or two students in front of a TV or computer screen using a DVD player
- An individual student with a portable digital audio player
- A group of students in a wired classroom

Comments:

Factors bearing on this analysis include the sorts of material the course creator wants the student to experience simultaneously, students' note-taking needs, flexibility, reliability, and accessibility (in terms of time and place of student use), cost of production, distribution, and revision for the institution.

Step 6:

Reflect on fresh pedagogical possibilities opened by these new alternatives.

E.g.:

- Multiple presenters (controlling the guest in "your" classroom)
- Q and A presentation (prepared in advance)
- Multiple reactors, mentors, commentators
- Problems and hypotheticals with more flesh

Comments:

For all the improvisational possibilities the classroom opens, it also constrains. Its standard dynamic forces most students, most of the time into participation that is vicarious at best. Practical considerations discourage the bringing in of other authorities than the teacher or other non-experts than the students.

Step 7:

Structure the course or course elements so as to facilitate rather than frustrate future alterations.

See:

For a presentation designed to cope with constantly changing parameters
http://www.law.cornell.edu/socsec/course/topic04/topic04
http://www.law.cornell.edu/socsec/course/topic04/topic04
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Comments:

Keep all presentations in editable format and avoid authoring tools that lock you into a format that is difficult to edit. (Beware the enticement of tools that make initial creation simple – RealPresenter.)

Isolate and index the changeable content.

Avoid putting frequently changing content in a medium that is difficult to alter (video > audio > text). Text is easier to change than audio (mainly because it is easier to search). Audio is easier to change than video. (Think about having to match clothing, posture, and hair style in order to update a paragraph of your presentation.)

Step 8:

Consider how the sequence of distance activities you are designing and constructing will, over the course of the term, achieve appropriate levels of pacing and accountability.

See:

Social Security Law Syllabus and Schedule: http://www.law.cornell.edu/socsec/course/syllabus.htm (Appendix D)

Comments:

Clear structure and a reliable schedule are key to successful distance education. This is especially true for students whose center of gravity continues to be in weeks filled with scheduled classes, appointments and obligations of other kinds. They must be helped to understand that the demands of a course which doesn't meet are no less real and that its assignments cannot be deferred until the week before exams.

Step 9:

Design a front-end that will reduce the inevitable student uncertainty about course methods and expectations (and will inform decisions to enroll).

See:

Social Security course introduction http://www.law.cornell.edu/socsec/course/intro/index.htm (Appendix E)

Is this course for you?

http://www.law.cornell.edu/socsec/course/index.htm#for_you

(Appendix F)

Comments:

At present many students will bring deep levels of uncertainty about course methods and expectations to a distance course.

Those who have taken one or more "distance education courses" and have fixed expectations can pose an equivalent problem, for they may well have experienced something quite different from the approach your course embodies.

Step 10:

Build and then conduct the course.

Comments:

Your choice of method will affect (or be affected by) how much lead-time you have for construction.

While the course structure, readings, schedule, and first few weeks of instruction need to be in hand before the course gets underway, unless the form of distributing the presentations requires otherwise the course creator can, during the first year, complete the course while it is underway. That was our frenetic pattern in 2000-2001; my presentations were at times being completed only a week before they were released online to the students.

Step 11:

Evaluate the course outcomes with the help of students and others.

See:

2004 online course questionnaire:
http://www.law.cornell.edu/socsec/course/questionnaire 0
4.htm
(Appendix G)

Comments:

Until distance education courses and course components become prevalent, the standard law school course evaluation instrument will not provide adequate data on student response to the distinct features of this mode of learning. In addition those courses that enroll students from multiple institutions require a method of evaluation that allows both compiling and comparing responses from all of them.

Step 12:

Prepare the report required by ABA Interpretation 306-1.

See:

The LII report on this year's course (Attachment H)

Comments:

Interpretation 306-1 of ABA Standard 306 calls for an annual report from all schools offering a distance learning course. The LII's practice is to submit a single report on behalf of all participating ABA accredited schools, furnishing each with a copy and inviting them to submit a supplemental report if they desire.

Step 13:

Update and revise the course or course components for use again.

Comments:

Much of the value of a well-designed distance course lies in its suitability for reuse (the investment point made in connection with Step 1). Fields of law change at different rates, but most courses, will most years face some change simply to incorporate new decisions, statutory or rule amendments, and the like. And during the early years of our collective experience with distance education or with any single distance course, lessons learned in running a course will inevitably suggest revision. So long as the course was designed in anticipation of revision (Step 7) its inevitability should not undercut but rather sustain the fundamental value proposition for both teacher and institution represented by their original investment in the course.

Memorandum

To: John A. Sebert, ABA Consultant on Legal Education

From: Peter W. Martin, Legal Information Institute, Cornell Law School

Date: 10/23/2001

Subject: A Report on the LII's Two Multi-Law School Courses Conducted via the

Internet in 2000-2001

I. Background

In 1996 we (Cornell's Legal Information Institute or LII) invited a number of law schools to join us in an Internet-based course. Three accepted: the University of Colorado, Chicago-Kent College of Law, and the University of Kansas. For three successive years students at those institutions and Cornell studied "Copyright and Digital Works" with me and each other. The course made use of "off the shelf" Internet software (Web pages, Web-based conferencing, desktop video conferencing, and e-mail) and succeeded in adapting the law school interactive paradigm to this quite different educational environment.

Begun before the ABA's 1997 "Temporary Distance Education Guidelines" the course, nonetheless, fit within them being: a) "disseminated from one law school and received at another law school" (see section 1 of the guidelines), b) highly interactive (see section 4) and c) based on commercial grade technology (see section 5). In diverse settings including two CALI conferences (1998 and 1999), three AALS annual meetings, an ABA-sponsored distance education conference (Nov. 1999) and meetings of the section's Technology Committee the LII reported on this three-year experiment as it proceeded.

In the spring of 1999, we concluded that, rather than continuing to evolve the initial model further, we should take what we had learned about available technology and appropriate pedagogy, pause a year, and create a fresh pair of distance learning courses. In doing so, we hoped to break free from the weekly "real time" video conference sessions that were central to the original model. We carried through with that plan and did, in fact, offer two totally asynchronous distance learning courses last year (2000-2001). This report summarizes what we did and how and concludes with several

tentative conclusions emerging from this most recent phase of the LII's ongoing exploration of distance learning in law.

II. The Courses

The LII's first on-line course focused on an area of advanced copyright law. The 2000-2001 offerings were: 1) Introduction to Copyright and 2) Social Security Law. The former is a high demand area that many schools are forced to lump together with other topics of intellectual property in a survey course. The freestanding course we offered gave students with strong interest in the field an opportunity to go deeper, while allowing the participating schools to reconfigure their intellectual property offerings. Social Security is, by contrast, a subject that receives negligible curricular attention in U.S. law schools despite great importance and legal complexity. It is one of a host of important legal topics around which a critical mass of student interest and faculty expertise often cannot be found within a single institution. Courses covering such topics are, in our judgment, prime candidates for a distance learning structure that enables schools to pool teaching resources and students.

Both Copyright and Social Security Law are upper-class electives. Although normally they carry no prerequisites, their position in the curriculum assures that students enter with a solid understanding of the types of legal materials that frame the respective areas (statutes, regulations, appellate decisions), with skills of study and analysis developed during least one full year of law school study, and with a command of legal concepts and vocabulary that can be deployed to gain understanding of these new fields. As taught in most schools neither course focuses significantly on the development of professional skills or involves experiential learning in the way a clinical course does or an evidence, procedure, trial practice or negotiation course may. Instead they are organized around their respective legal domains. Whether taught in a classroom or online, they characteristically aim to build a solid understanding of the salient features of the respective fields, plus a sense of how to approach key issues from several important lawyer perspectives such as those of advocate, counselor, advisor, arrangement-maker, policy analyst or critic. Since neither area is static, topics of proposed or imminent change regularly prompt analysis of contending policies and political forces.

In short, this second round of distance learning experimentation continued the LII's original, quite conservative concentration on on-line instruction as a means of providing greater content depth or breadth in the upper class curriculum through the sharing of teaching resources and students. It neither ventured into the first year learning experience nor into a broader range of upper-class course types. The principal difference between these courses and their predecessor consisted of the substitution of fully asynchronous components for "real time" exchange. This change freed instruction from the scheduling constraints inherent in assembling students at the same moment across multiple time zones and academic schedules. Less obviously, it allowed larger

enrollments without loss of interactivity or accountability. This, in turn, made investment in reusable multi-media content economically feasible.

III. What Other Law Schools Participated and Why?

A total of seven law schools accepted the LII's invitation to join in last year's experiment – Arizona State, Chicago-Kent, Kansas, Rutgers-Camden, Rutgers-Newark, Seattle, and Vermont – with four signing up for each course (Chicago-Kent participated in both).

Were distance education arrangements like this standard practice, with most law schools participating as providers and receivers, the basis for a school's decision to participate or not as to either of these particular courses would have been straightforward. Assuming adequate assurance about the quality of the materials and instruction, the issue would reduce to considerations of curricular fit, faculty deployment, and budget – e.g., does the course add an important subject the regular faculty cannot cover (Social Security) or provide desirable flexibility and increased options in an area of strong student demand (Copyright) at an acceptable cost?

Because interest in distance education is high and experience rare, there was a further reason for schools to join in. The experiment offered an opportunity to observe carefully designed and executed distance education at first hand. Few, if any, other law schools have experience in Internet-based legal education comparable to the LII's. Participating schools were invited to designate one of their own faculty members as an "auditor/observer." Every effort was taken to open up the process of course construction and delivery. Schools were encouraged to use interviews, questionnaires, and other means to evaluate student response and educational effectiveness. In short, participation provided a means of experimenting with distance education for schools that had not yet done so and of exploring an alternative model for schools that had.

In order to share the results and compare our experience with that of others, the Legal Information Institute ran a workshop on distance learning course design during the summer of 2001. The weeklong conference drew faculty members and technical staff from a broad diversity of institutions. Schools that had participated in either one of the 2000-2001 LII on-line courses were assured of inclusion and contributed importantly to the proceedings (available on-line at:

http://www.law.cornell.edu/background/distance/workshop/).

IV. What Participation Entailed

As with the LII's earlier distance learning venture, all participating schools retained responsibility for course registration, exam administration, and related logistical matters. Students registered not with Cornell but with their home institution. Grades and credits

were local. Participating schools were also responsible for front-line technical support for their own students (with LII back-up), for assuring that their students had adequate computer resources and Internet connection, and for providing a meeting room suitable for local discussions among enrolled students.

In order to take the course students had to have regular access to multi-media capable computers with sound and Internet connections capable of delivering streaming audio reliably – either in the law school or elsewhere. As previously noted, participating schools were encouraged to designate a local faculty member to be included in all course communications. In short, as was true of our earlier distance education arrangements, these courses were, to use the language of the ABA temporary guidelines, in all critical respects "disseminated from one law school and received at another."

The Legal Information Institute's responsibilities included: preparation and distribution of course materials (free in digital format to the students), instruction, performance monitoring (the on-line analog of attendance), student evaluation and grading. Participating schools paid a fee of \$500 per student per course.

V. Pedagogical (and Technological) Approach

The basic components of this latest LII distance learning model included:

- digital readings (with a print-on-demand option)
- scheduled progression through a sequence of topics paced by Web-based discussion and mandatory interactive exercises
- hypermedia presentation (streaming audio linked to assigned texts and supplementary materials) *
- computer-based tutorials and exercises (similar to those CALI has long distributed) tightly integrated with the readings and presentation material
- asynchronous but paced teacher-student, student-student written discussion
- short writing and problem-solving assignments submitted via the Net for teacher evaluation and feedback

^{*} The presentation component used audio rather than video because of our conviction, confirmed by experience, that the substantially greater cost of making and revising video materials is not warranted so long as the principal content would be a "talking head." For more on this point, see IX.D. *infra*.

• an end-of-term exam for final evaluation of student performance

VI. Schedule and Exams

Because the LII's earlier distance learning course included a weekly video conference it could not be fit completely within a single academic term. Inconsistent start times and vacation patterns among schools required distribution of those real-time class meetings across two semesters. The current model, being more flexibly constructed, did not require all students to be "in session" at the same time. This permitted each course to be conducted within a single term. Copyright was offered in the fall; Social Security, in the spring. The precise beginning and ending dates were set to correspond to the schedules of the participating schools. Final exams were taken during each participating school's regular examination period. In order to allow full use of the digital materials with which the courses had been conducted at this critical point, the exams were administered on a "take-home" basis in schools that did not otherwise permit students to use computers to write their exams.

VII. Scale

Our previous model of distance learning worked only with relatively small numbers – e.g., eight students per school and 32 total. One important question we sought to answer with the new approach was whether it could effectively accommodate larger enrollments, comparable to those common in specialized law school courses taught conventionally, without sacrificing interactivity or other qualities important to effective learning.

Working closely with the participating schools we achieved enrollment figures that provided that scale. Ninety-five students took the fall term Copyright course; sixty completed Social Security Law.

VIII. Placing the LII's Approach to Distance Learning in Context

The form of distance education most widely practiced by law schools to date represents the 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 to students who are assembled at the same time in other locations. With additional investment in technology infrastructure those remote students can participate in discussion with the teacher and each other. The principal advantage of this mode of distance education is that it requires very little adjustment of working patterns or expectations on the part of either teacher or student. It can 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.

Major drawbacks to this form of distance education include 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 time zones.

The LII's current distance education courses rely on less costly technologies and embody patterns of instruction that make substantial use of asynchronous exchange and pre-programmed instructional materials. The choice reflects a conviction that, long term, this direction holds the greatest potential gains from networked digital education. Last year's experience only strengthens this belief.

IX. Some Preliminary Conclusions

A. The fundamental architecture and methodology are sound

For law courses of this type, i.e. content-defined and focused on a statutory domain, and with students already well grounded in the study of law, the model appears effective. The LII's 2000-2001 offerings generated educational outcomes that compare favorably to those realized in similar courses taught in a conventional, classroom-anchored mode.

Some might argue that in light of the widely observed tailing off of attendance and engagement among upper-class law students that constitutes too low a benchmark. Unquestionably, our ambition is to achieve substantially better outcomes (at no greater cost) through on-line methodologies, and our tentative conclusions, set out below, encourage us to believe that we are headed down that path. But in any discussion about regulatory and administrative structures that privilege classroom instruction (as the current ones do), the effectiveness of conventional teaching methods inevitably and appropriately becomes the initial basis for evaluation.

B. Student mastery and engagement

1. Gauged by the teacher

The students enrolled in these two courses represented a greater range of language and analytic skills, work and life experience, and facility in doing "law student work" than a teacher is likely to confront in a single law school student body. Since some of the participating schools had part-time divisions, the mix of students in both courses included significant numbers who brought directly relevant work experience to the exchange. Taking account of that diversity, I judge the quality of student work product I saw through the two terms (the weekly problem submissions, on-line discussion contributions, mandatory mastery exercises, and final exam) to be of very high quality.

Measured in terms of: 1) understanding and mastery of course content, 2) sustained engagement, and 3) learning from one another, the course outcomes were, overall, better than I would expect to achieve with the same students meeting thrice a week through the term.

With a classroom-anchored course culminating in a final exam, there are few reliable mechanisms for monitoring individual student progress during the term. Attendance may or may not be effectively tracked. Class preparation may or may not be audited by periodic queries directed at non-volunteers. Even with the most rigorous application of "Socratic" teaching the large upper-class course provides plenty of cover for students who opt for a "wait and then cram for the exam" approach. In contrast, on-line teaching methods enable a teacher to be far more attentive to the progress of individual students. The model of asynchronous instruction represented by the LII's 2000-2001 courses included weekly progress expectations and four mandatory progress checkpoints (the "mastery exercises"). Placed in a work environment that logged student contributions, it facilitated prompt intervention when any student fell behind. As teacher I experienced an unfamiliar level of confidence that I was detecting student difficulty or simple procrastination in time to make a difference.

With a conventionally taught course, the overall work load is crudely measured by the minutes per week of class time. There are three credit hour courses and four. Inevitably some three-hour courses impose more demands on students than others, but, over time, students themselves police excess in one direction, faculty colleagues and academic administration, extremes in the other. For an asynchronous on-line course, with no shared clock running on any part of the student-teacher interaction, there is, at present, no such convenient metric. Each of the presentation or problem modules comprising these courses did carry an explicitly stated "run time". But summing up these times yields a useless number, for several reasons. First, most students exercised the control over delivery offered by the on-line environment to pause, reflect, take notes, and repeat. Consequently, completion of any 20-minute module could easily take twice as long. Total time spent reading, reflecting on and responding to messages in the on-line discussion area or composing a problem submission can only be the subject of speculation by course builder and teacher.

So long as such courses remain the exception rather than the norm, however, their contents and work demands can be benchmarked against conventional ones. Both of the LII on-line courses covered exactly the same ground as their classroom-based equivalents at Cornell.

2. As experienced by the students

Students in both courses were encouraged to fill out a final course questionnaire, online, during the week before their final exam. The response rate was 30% in the fall, 38% in the spring. To begin, the students (who were predominantly in their last year of law study) were asked to compare the on-line course they were completing with "other specialized law school courses with comparable credit." Specifically they were asked about: (1) the total time and effort required, (2) their own success in mastering the material covered, and (3) the quantity and quality of teacher feedback and amount of discussion with teacher and other students. Answers were consistent across the two courses with a strong majority of students reporting that they worked harder, achieved comparable or greater mastery, and experienced more feedback and exchange than in a classroom course of similar content. (Since the Social Security course came second, it benefited from a few lessons learned during the first term and, to the extent there were discernible differences in student evaluation of the courses, it received slightly more favorable ones.)

C. Course architecture – modularity

The challenge of disaggregating the range of activities carried out during standard classroom meetings into presentation modules, interactive exercises, problems for analysis and submission, and on-line teacher-student discussion forces an unusual degree of attention to pedagogical ends and means. Done properly, the resulting asynchronous components allow students to organize their course work for more successful learning. The fixed length class at a standard meeting time imposes significant burdens to which most law faculty members and students are blinded by familiarity. The duration is often too long, sometimes too short. In terms of student readiness and attention, the moment is arbitrary and, therefore, frequently the wrong one.

By contrast, students taking these on-line offerings had enormous flexibility in how they fit the multiple course elements into their weekly schedules. Such control over the exact time and place of their learning was, for the students, the most highly valued feature of the asynchronous course architecture. Not only could students to take up a given module when they were ready and able to focus, they could run it, pause, take notes, and return to puzzling points. In numerous ways they could exercise a degree of control over each step of the process quite impossible in a real-time classroom session.

Course questionnaire results indicate that more students than not took advantage of the capacity to pause and replay the course presentations and also to block and copy the presentation outlines and visited text (e.g., statutory provisions) in the course of note-taking. As one student explained: "What was great about the [format] was that I was able to go through the [presentation] once but pause many times. I would write what you said and then stop Then I would look at the statute or regulations and highlight it and make notes in the margin."

In addition, modularity has a direct bearing on future reuse, course maintenance and other important elements directly related to the economics of this form of education, a topic addressed below.

D. Course architecture - streaming audio linked to web-based content

1. Why not video?

In faculty workshops and other settings where these courses have been described and demonstrated, one question that recurs is why we chose audio rather than video for the "teacher presentation" components. The reasons are numerous.

To begin, there is a stark cost-benefit difference between the two. While the educational gain from using video can be enormous when the medium is being used to show process or action – whether the topic be marine biology, migration trends of the past century, volcanic eruption or cross-examination at trial – the educational gain from adding a head and gesture to the teacher's voice is minimal. No doubt some psychological value flows from students being able to visualize their professor, but that can be realized through a short video introduction.

On the cost side, the gap is enormous. Video imposes several different types of added cost. Most obvious is the greater expense of initial production. Students bring expectations of broadcast quality to video material. Creating video content to that standard is more expensive than first-rate audio by several orders of magnitude. Furthermore, whatever assumptions one makes about the ongoing rate of course revision in successive years, even at levels as low as 10-20% per year video, being far more complicated is, therefore, more costly to maintain.

Bandwidth is a totally separate matter. The streaming audio, multi-media technology used in the LII courses operates quite reasonably over a dial-up Internet connection. Streaming video does not. Its use requires students to have more capable and more expensive network connections, and it also obliges the offering institution to have greater serving capacity.

2. Some distinct advantages of streaming audio linked to Web-based content

Most law teachers create in relative solitude. They write, they prepare and deliver their courses by themselves. Use of teaching assistants is rare. Effective though they may be in live lecture and discussion formats, few are comfortable and as skillful before a camera.

For these and other reasons, a mode of multi-media course production that begins with a microphone attached to the law professor's office computer is accessible to many more

teachers than one requiring use of a studio and video crew. With current authoring tools, high quality audio can be prepared, edited, and revised by a faculty member, alone, in his or her office. Software tools designed to allow presenters of all kinds to prepare audio files to accompany their PowerPoint slides can be readily adapted to the creation of presentations that refer to a wider range of Web-based material. With a set of course materials on-line, the teacher can speak about a statutory section or passage in an assigned case and have the very text automatically loaded in the student's browser as it is being discussed. The student can, in turn, pause the audio in order to reflect on the text, copy portions into his or her notes, or follow hypertext links that connect to related material, as for example, another statutory section defining key terms or qualifying its apparent meaning.

Within a modular architecture, such content can be assembled in different combinations and configurations. It can, in successive years, be altered by adding, subtracting, or substituting new audio and textual material, without the need to rebuild from the beginning.

E. Course architecture – interactivity

1. The mastery exercises

The interactive features included one that drew near unanimous praise, the set of four "mastery exercises". These mandatory problems, placed at the end of two to three weeks worth of material, called for students to submit a few paragraphs of analysis, via a Web form. Each problem was posted a week before its deadline. Forty-eight hours after the deadline the class received a generic (i.e. non-individualized) feedback memo. It set out my view of the issues and responded to common errors or confusions revealed in student submissions. A typical student reaction to this course component read: "I thought the mastery exercises were useful and the feedback was very helpful too." Another student, perhaps more candid, wrote: "The mastery exercises were a necessary evil. I am thankful they were included insomuch as it is too easy to fall behind. Those exercises forced me to keep up with the material and review it again and again until I found the appropriate answers." Yet another exclaimed: "Finally a law school class where a question is not answered with another question."

2. Interactive self-assessment exercises

Also popular were the interactive exercises that allowed students to gauge their level of comprehension following the presentations and readings on a topic. This is one dimension in which several expressed a desire for more: "The pop up windows for the illustrative questions were great. I wished they popped up for each question."

3. On-line discussion preceded by problem submissions

The on-line class discussions had both fans and detractors with the obvious base for comparison being discussions in a conventional class of similar size. Objectively several things seem clear to me. Including the forms which asked every student to submit a question or take a tentative position on a hypothetical problem before the related on-line discussion began many more students were involved in the exchange throughout the course, topic by topic, than I have ever been able to bring into "real time" classroom discussion. The evident degree of reflection and level of discourse were high and I observed more frequent introduction of personal experience and references to material outside the assigned readings, including current events. However, just as some students found this a less inhibiting venue for "discussion" than a classroom, others exhibited at least comparable reluctance to "speak," perhaps in part because the class included others they did not know, from different law school communities. Some reluctant posters said they liked the discussion environment, nonetheless: "I like the discussion area. I like to read all the messages even though I didn't put anything there.:-)"

F. Sources of student dissatisfaction

Most of the students were pleased with their on-line instruction. A number pronounced it their best law school learning experience. What were the complaints? Anyone who has taught an upper class law school course can imagine many of them. To some my voice was soothing, to a few it was monotonous. The expectation of involvement struck a handful as "unrealistic." Said one: "I have never been in any class where EVERY person has something to say on EVERY topic!"

Based on a review of the full range of student feedback, I have concluded that most individual student frustration and dissatisfaction can be traced to one of three sources: 1) technical problems, 2) specific expectations of what an on-line course would or should be that were not fulfilled by this one, and 3) the challenge of dealing with digitally-delivered course readings.

1. Technical problems

Most students reported few or no technical problems. Those with the worst experience fell in one of two categories. They were either at a law school plagued with frequent network difficulties (true of at least one of the participating schools) or they were relying on an Internet service provider (ISP) with inadequate capacity, most frequently AOL. Learning from the fall term course, we emphasized at the outset of the second one that students should, as a test, run the introductory unit of the course under the conditions (computer, ISP, time of day) most likely to prevail later while they would be taking the course.

2. Expectations

Upper class law students know what to expect in a classroom-based course. Currently at least, those taking an on-line course have far less certain ground for anticipating how the course will be conducted or how they will, as individuals, respond. To deal with this source of potential difficulty, we placed materials at the beginning of each course that explained and also modeled how the course would function. This is a second area in which our second course benefited from experience with the first.

3. Digitally-delivered readings

On-line courses can be taught from standard commercially published casebooks. Concord does so routinely. A separable feature of the LII's approach to date has been the use of original course materials that, being free of the license constraints, can be delivered on-line along with the rest of the course. This approach permits tight integration between the readings and the on-line instructional materials. With a full set of course materials on the Web, our presentations can and regularly do link to portions of the assigned readings. The same is possible with comments posted in the on-line discussion area.

On-line delivery need not mean reading from the screen. For both courses the readings were offered in parallel versions: a browsable format and also downloadable word-processing files ready for printing. The range of choices and the consequences of some of them (i.e. the bulk and, at some schools, the cost of printing out the full course materials) surprised a number of students. The complaints on this score were significantly reduced in the spring, probably also a consequence of greater clarity in the course introduction about what to expect coupled with specific advice about how to manage the readings.

G. Teacher time and effort (and institutional costs)

Institutions and teachers need to conceive of the preparation of on-line courses as being much more like writing a book than like teaching a class. The time, level of commitment, and need for attention to detail required to create the first version of a multi-media on-line course can be justified only if viewed in book-like or long-term investment terms.

When the course is constructed of modular and reusable elements that investment can pay attractive dividends, but only when the course is offered to successive cohorts of students. As it is offered for the second and third time, requirements of teacher time and effort reduce to those entailed in revising the reusable material and interacting with, monitoring, and assessing the students.

X. Continuing the experiment

Encouraged by last year's experience we are repeating both courses this year. Since they were built around reusable modules, designed with an eye to revision, we have, as we planned, been able to make updating and other changes selectively (without starting over from scratch).

The course architecture also contemplated re-assembly with appropriate additional material for different student populations. To explore this process and its potential, we have adapted last year's Copyright Law course to produce an offering that introduces the principal issues and features of the field to university students in such areas as journalism, art, music, and computer science. This non-JD course is being tested at Cornell during the current term in anticipation of wider distribution.

The Social Security Law course will again be offered to law students during the 2002 spring semester. Participating law schools will include some of last year's group joined by one or more others.

XI. Further Information

Both LII courses, as offered last year, remain at the institute's Web site. Unlike conventionally taught courses where the only residue following completion rests in notes and memories, they can still, months later, be inspected in full.

While the sites are not open to the public, any member of the Council, its staff or committees are welcome to visit them. The respective URLs are:

* * * [Copyright]

http://www.law.cornell.edu/socsec/course/ [Social Security]

The materials are, in differing degrees, password-protected. For anyone seeking an overview, the best place to begin is with Social Security site. It allows access, without password, to the course syllabus, readings, multi-media environment, and introduction. To proceed further with that course or to inspect any of the Copyright site requires a guest password. It is available upon request. Anyone wanting the password for either course or further information about them should feel free to contact me directly, by phone (607-255-4619) or by e-mail (martin@lii.law.cornell.edu).

starting point author lii home



- Course syllabus and schedule
- Readings
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Topic 4: Derivative Benefits for Spouses --

Benefits for spouses, former spouses, and surviving spouses

A. Background - At the point of application **2**

- Situating this topic in the overall scheme
 - How spouse and other secondary benefits link to the covered individual
 - How spouse and other secondary benefits interact for recipient
- The pertinent provisions of the act and regulations

B. Background - During pre-benefit years 🗷

- The circumstances under which an individual can disregard spouse entitlement rules
- What pre-application events bear directly on entitlement
 - Marriage (including remarriage)
 - Divorce

C. Approaching the readings 🗷

- **D.** Some illustrative and problem situations **2**
- E. Framework for discussion 🗷

F. Discussion 2

• Course discussion of this topic will begin on February 5. You should be ready to join in at that point.

To begin $\Rightarrow [\underline{Audio}]$

Duration of audio: 14 minutes

Background - During pre-benefit years

1. Circumstances under which an individual can disregard spouse entitlement rules

- Marital status
- Married but not old enough (and not caring for children)
- Personal earnings recordhttp://www.law.cornell.edu/socsec/course/topic04/topic04 a future.htm
- Current earnings
- Resulting equity claims

2. Taking spouse benefits into account in retirement and insurance planning

- Numbers for building scenarios:
 - "low covered earnings" 2002 \$14,963 producing a 2003 PIA of approx.
 \$701 or \$8,412 / yr.
 - o average covered earnings 2002 \$33,252 producing a 2003 PIA of approx. \$1,158 or \$13,896 / yr
 - o maximum covered earnings 2002 \$84,900 producing a 2003 PIA of approx. \$1,721 or \$20,652 / yr.
 - o average PIA for newly entitled retired worker beneficiaries
 - men
 - Dec. 2001 \$1,169 or \$14,028 / yr.
 - women
 - Dec. 2001 \$750 or \$9,000 / yr.
 - excess earnings test (for individuals below their "full retirement age")
 2004 \$970 or \$11,640 / yr. with earnings above those amounts reducing benefits \$.50 on the dollar

3. Pre-application events bear directly on spouse benefit entitlement

- Marriage
 - o When?
 - o For how long?

- Weinberger v. Salfi, 422 U.S. 749 (1975) (nine-month duration of relationship requirement not unconstitutional)
- Divorce
 - o When?
- Remarriage
 - o When?

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Course sign-in [Required for access to all instruction pages and discussion area]

- Course syllabus and schedule
- Readings
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course syllabus and schedule

Spring 2004

Preliminary topic: Course Introduction

Topic 1: Overview of the Program -- Who receives benefits, under what circumstances. Relationship between payments in and benefits received. Key legal issues and the program's procedures for their resolution. Week of 01/12, Discussion starting 01/15

[Assigned Readings | Course of Instruction]

Topic 2: Program History -- Important stages in the program's evolution and the economic forces and politics that shaped them. **Week of 01/19, Discussion starting 01/22**

[Assigned Readings | Course of Instruction]

Topic 3: Retirement and Disability Benefits -- Coverage and benefit calculation, the individual connection between payment of tax and receipt of benefits. **Week of 01/26, Discussion starting 01/29**

[Assigned Readings | Course of Instruction]

Topic 4: Derivative Benefits for Spouses -- Benefits for spouses, former spouses, and surviving spouses. **Week of 02/02, Discussion starting 02/05**

[Assigned Readings | Course of Instruction]

<u>Mastery Exercise #1</u> - Due: 11:30 p.m. 02/09 > Feedback Memo

Topic 5: Derivative Benefits for Children -- Benefits for children in varying types of relationship with the "wage earner": including children born within and outside of marriage, adopted children, stepchildren, grandchildren. **Week of** 02/09, **Discussion starting** 02/12

[Assigned Readings | Course of Instruction]

Topic 6: Continuing Earnings, Age, and Benefits -- How the program's "retirement test" reduces benefits in relation to continuing earnings and "retirement age" affects benefit amount. **Week of 02/16, Discussion starting 02/19**

[Assigned Readings | Course of Instruction]

<u>Mastery Exercise #2</u> - Due: 11:30 p.m. 02/23 > Feedback Memo

[Dealing with the term break - The winter or spring breaks of the several participating institutions fall at different times. All should adjust the schedule for the next four topics (7 through 10) to fit your own school's break schedule. For example, if your school is not in session during the week of 03/15 you need not begin Topic 10 until the following Monday. 03/22. No matter when your break falls you should arrange to complete Mastery Exercise #3 on schedule. By 03/29 we should all be back in synch.]

Topic 7: Disability Benefits -- The standard. **Week of 02/23, Discussion starting 02/26**

[Assigned Readings | Course of Instruction]

Topic 8: Disability Benefits -- The administrative process. **Week of 03/01, Discussion starting 03/04**

[Assigned Readings | Course of Instruction]

Topic 9: Disability Benefits -- Areas of particular difficulty. **Week of 03/08, Discussion starting 03/11**

[Assigned Readings | Course of Instruction]

Topic 10: Judicial Review -- How one secures judicial review of an individual determination, on the one hand, and of a regulation or administrative practice affecting many, on the other. **Week of 03/15, Discussion starting 03/18**

[Assigned Readings | Course of Instruction]

<u>Mastery Exercise #3</u> - Due: 11:30 p.m. 03/22 > Feedback Memo

Topic 11: Lawyers and Social Security -- Social security representation: Who does it and on what terms and conditions. **Week of 03/29, Discussion starting 04/01**

[Assigned Readings | Course of Instruction]

Mastery Exercise #4 - Due: 11:30 p.m. 04/05 > Feedback Memo

Topic 12: The Relationship Between Social Security and Other Earnings Replacements -- How Supplemental Security Income, Workers Compensation, Private Pensions, and Medicare interact with

Social Security and vice versa. Week of 04/05, Discussion starting 04/08

[Assigned Readings | Course of Instruction]

Topic 13: Reform -- Current Social Security "reform" proposals. **Week of 04/12, Discussion starting 04/14**

[Background Readings | Background Reflections] | Your tentative position on resolving the fiscal problem

Exam: Exam under the administration, schedule, and ground rules of each participating school -- may at the school's election be a "take home" exam. In all cases, the exam will be open-book and open-computer, with three hours for reading, reflecting, and writing.

Course Questionnaire: Please complete the online questionnaire before you leave the course behind and move on to other things, i.e. before the end of your school's exam period.

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- <u>Course syllabus and</u> schedule
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Introduction

Instructions: This unit not only surveys the course content and methods; it also introduces the streaming audio form of presentation at the core of all subsequent instruction. If you haven't already installed the free RealOne Player you will need to do so before proceeding. Indeed, if you haven't already run the course welcome and taken the other "getting started" steps at the bottom of the course home page you should also do so now. On this and all subsequent unit "course of instruction" pages each arrow (In links to a presentation outline. To begin an outline's streaming audio presentation simply click on the link in the upper right hand corner.

A- The Field 2

- Social Security in what sense?
- Social Security Law
- Some measures of the field's importance
- Several possible approaches to this legal system

B- The Course

- Coverage (necessarily introductory)
- Materials
- Course organization
- Feedback and final evaluation (grades)
- Discussion

C- The Law 2

- Title II of the Social Security Act
- 20 CFR, Part 404
- Cases
- Rulings
- Other

starting point author lii home



Course sign-in [Required for access to all instruction pages and discussion area]

- Course syllabus and schedule
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Scope and Importance

This course, offered during spring term 2004, provides an introduction to Social Security Law. It covers issues of entitlement and benefit calculation arising out of the set of programs popularly referred to as Social Security.

* * * *

Nature of the Materials and the Course

This course consists of five interconnected components: (1) a series of background presentations on a sequence of topics that, together, introduce the field, (2) a companion set of assigned readings, (3) a fully integrated set of problems, questions and mastery exercises designed to assist each participant to develop and test his or her mastery of the material, topic by topic, (4) a Web-based conference that functions as an online analog of classroom discussion, and (5) Social Security Law reference materials.

Is this course for you?

Since the instruction and discussion in this course takes place on-line, with no regularly scheduled class meetings, students taking it must be able to work independently. They need to be able to find the necessary time for its weekly presentations, assignments, and problems in their schedules without having those times assigned. The course will require the same commitment of time, study, and effort as a conventionally taught three-credit law school course. While there will not be the normal complement of weekly meetings the course has numerous deadlines. You get to decide exactly when and where you do the work but you will be expected to get it done on time. If you need constant reminders about deadlines this form of course instruction may present a challenge.

"Working independently" need not mean working alone. With the exception of the required mastery exercises and the final exam, students are permitted (even encouraged) to listen to the presentations and address the problems in groups of two or more. Many of you at each participating school may find it useful to set up a regular time and place for review and discussion.

An on-line course demands a fairly high familiarity and comfort level with the Web environment. If you can download and run applications, browse the Web, install software, manage files, and regularly communicate via e-mail, this should not be a problem. If, on the other

hand, you are hesitant and unsure about using the Web unless you have a course partner who can provide "technical assistance" this course may not be for you. For more details on this aspect of the course see the "get acquainted" material below.

Getting Started

- Register for the course through your own law school
- Get acquainted with the course on-line environment
 - Computer and browser set-up test
 - o Install the <u>free RealOne Player</u> software if you don't already have it or the equivalent
 - o Course welcome: [Audio]
 - o How to use this site
 - Some tips on using RealPlayer
- Proceed to the course introduction via the syllabus

Social Security Law 2004 - Course Questionnaire

Due: By the end of your exam period

Before your experience in this novel course has faded from short term memory I would appreciate your taking a few minutes to respond to the following questions about it.

Consistent with the ground rules for such questionnaires at most institutions I have set this form up so that it does **not** ask your name or require signing in. That permits you to submit it anonymously. It also means that when you submit the confirming message of receipt may contain the alert "Your SID was not entered with the quiz." So long as it also says "Your answers were received and recorded." everything has worked as it should. The database has your response but not your ID. Even if you have logged in and, as a consequence, you don't get the "Your SID was not entered ..." message, be assured that the your ID will be stripped off and not retained.

The form does ask for your school so that I can look for local patterns and also share the results from each participating institution with its administration.

Finally, do understand that the submissions will gather dust in the course database, unexamined by me, until after all course grades have been turned in.

I. Overall Questions

a. Amount of Work

Making appropriate adjustment for the novel nature of its several components and comparing this course to other specialized law school courses with comparable credit, how would you rate the total amount of time and effort required in this course?

Average	•
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b. Level of Mastery

Comparing this course to other specialized law school courses with comparable credit, how would you rate your own success in mastering the material covered during the term?

c. Feedback and Exchange

Comparing this course to others with comparable enrollment (85 plus or minus) taught conventionally, how would you rate the quantity and quality of teacher feedback and the amount of discussion with both teacher and other students?

Much more than average	•
------------------------	---

d. Technical Features

• Did technical problems get in the way? Were they temporary or did they persist? Are there technical additions or changes you believe would improve the course (e.g., presentations on CD, real-time chat office hours)?

If you had problems please describe them and their impact on your work in the course in the Comment Box 1 below.

- e. Getting Used to the Course Environment
 - Were there particular features of the course environment or procedures that in retrospect you wish had been more clearly explained at the outset?

If so please note in Comment Box 1 below and any suggestions you have about how to be clearer next time around.

f. The Overall Structure and Approach

• Would you take another course offered in a similar on-line format or have you discovered reasons why this approach doesn't work for you?

Comment Box 1: Responses to I-d, I-e, and I-f

Place responses to d, e, and f here, as well as any other comments about the overall structure and approach of the course and your response to it -- anything that might help me in improving the course for next year and furnishing guidance to students contemplating taking it. (Questions focusing specifically on the course content, presentations, on-line discussions, and mastery exercises follow.)



II. Course Content and Materials

- a. Topics covered in the course
 - What topics, if any, covered lightly this year or not at all would you recommend be deepened or added in 2005?
 - What topics, if any, would you recommend be trimmed back or eliminated?
 - Do you have any advice about the course's general approach to the field or specific suggestions on improving the sequence of topics?

Please respond in Comment Box 2 below.

- b. Course materials
 - Do you have any suggestions about the amount, content, or format of the assigned readings?

Please respond in Comment Box 2 below.

Comment Box 2: Responses to II-a and II-b



III. The Presentations and Interactive Problems

I am eager to receive any and all comments you have on the presentations and problems, ranging from their tempo (Did I speak too quickly, too slowly, too monotonously?) to the synchronization of the text and spoken content, to the adequacy of the popup window feedback on problems. Before turning to the open-ended comment form, however, on these matters, I'd like you to respond to two discrete questions.

Ran more than on	(If you select "other" please explain below.)
Did you block	and copy the presentation outlines or visited text into your notes? (If you select "other" please explain below.)
Comn	nent Box 3: Comments on presentations and interactive problems

What became your standard approach to the background presentations?

IV. The Course Discussion Area, Mastery Exercises, and Other

I've only got a single space left for you to comment on our use of the on-line discussion area, the mastery exercises (including their number and the feedback), and anything else you would like to share, including comparison with other on-line courses you have taken or advice about the course the prior specific questions have not called for.

Comment Box 4: Comments on use of course discussion area, the mastery exercises, and other course features not already touched upon



Many, many thanks for joining me in this adventure and for your assistance in helping me understand what about it worked and what didn't work.

Peter W. Martin

Click when ready to submit

Memorandum

To: John A. Sebert, ABA Consultant on Legal Education

From: Peter W. Martin, Legal Information Institute, Cornell Law School

Date: 5/27/2004

Subject: Report on the On-line Social Security Law Course Offered by Cornell's Legal Information Institute, Spring Term 2004.

I. Background

Interpretation 306-1 to the accreditation standard on distance education, Standard 306, calls for an annual report from schools offering distance courses. This report is submitted on behalf of Cornell Law School and the four other ABA-accredited schools that participated in the 2004 Social Security Law course offered by Professor Peter Martin through Cornell's Legal Information Institute (or LII). Those other schools are: Nova Southeastern, Rutgers-Camden, Rutgers-Newark, and William Mitchell College of Law.

If follows the same format as our report on last year's course.

This was the fourth year for the course, one of two the LII has created for on-line delivery. The principal components of the LII course design include:

- digital readings (with a print-on-demand option)
- scheduled progression through a sequence of topics paced by Web-based discussion and mandatory written exercises
- hypermedia presentation (streaming audio linked to assigned texts and supplementary materials)
- computer-based tutorials and exercises (similar to those CALI has long distributed) tightly integrated with the readings and presentation material
- asynchronous but paced teacher-student, student-student written discussion
- short writing and problem-solving assignments submitted via the Net for teacher evaluation and feedback
- an end-of-term exam for final evaluation of student performance

The Social Security course was first created by and is annually revised and conducted by Peter W. Martin of the Cornell faculty. This course has now been through three revision cycles, giving the LII unique perspective on the relationship between course architecture

and ease of course maintenance. Annual revision is essential to take account of changes in the field – caused by adjustments to the benefit formula, amendments to the act and regulations, and important new cases – and to make improvements of other kinds to both content and pedagogy.

For background on the LII's approach to distance education and further detail on how the Social Security course is structured and conducted and why, see the LII's 2001 distance education report, available at the ABA Web site

- < http://www.abanet.org/legaled/distanceeducation/distance.html >. The 2004 version of the course itself syllabus and schedule, readings, hypermedia presentations, interactive problems, and mastery exercises is accessible online at
- < http://www.law.cornell.edu/socsec/course/>. While a login name and password are required beyond the first topic, a guest login will be furnished any member of the Council, Standards Review Committee or ABA staff requesting it. A full set of responses to the student questionnaire summarized below is also available upon request. (To receive either send email to < martin@lii.law.cornell.edu >.)

The 2004 Social Security course enrolled eighty-seven students from six law schools (including one non-ABA-accredited school, Concord) spread across four time zones in the U.S. and at least one in Asia. The participating institutions, like the nine others who have joined with us in past on-line courses, viewed this as an economic way to enrich to their upper-class offerings while also becoming familiar with a fully developed model of asynchronous legal instruction.

The terms and conditions for participating schools remained as described in our 2001 report. Each school was responsible for such logistical matters as course registration and exam administration vis-à-vis its own students. Non-Cornell students registered not with Cornell but with their home institution and received local grades and credits. Their performance was graded in relation to that of other students from the same institution.

The Legal Information Institute's responsibilities included: preparation and distribution of course materials (free in digital format to the students), all instruction, performance monitoring (the on-line analog of attendance), student evaluation and grading. Cornell's charge was \$500 per student, with a minimum fee of \$2,500 per school. Institutions concerned about the fiscal impact of uncontrolled enrollments were free to set an enrollment cap.

II. Student response to the course

As in years past, the student response was, in general, quite positive. A course questionnaire to which 75% of the class responded confirmed that for a substantial majority the model worked as envisioned.

Most of the responding students would take another course offered in this format. That is not, however, because they found this one easy. Eighty-one percent of the respondents rated the time and effort required by the Social Security course as either much more (22%) or slightly more (59%) in comparison with other upper-level law courses covering similar content at their institutions; only 5% rated it "less." Concerning the quantity and

quality of teacher feedback and discussion with teacher and other students, 69% judged it greater than that in conventionally taught law courses with similar enrollment, an additional 24% rated it comparable. Asked to characterize their ultimate success in mastering the course content, 83% reported that they had achieved levels of mastery at least equal to those they achieved in a classroom-taught course.

Did the students from the several institutions respond at all differently? Only to a modest extent. Students from Concord were more likely to characterize the level of effort required as "average" for a specialized upper level course than students from other schools and proportionately more students from Rutgers-Camden (over 50%) labeled it "much more than average". The dominant response from all schools was an "average" level of mastery; however, one-third of the Cornell students reported less than average mastery (Over half the Cornell students took the course on a pass/no pass basis.) while over forty percent of the Rutgers-Newark students reported above average mastery. A majority of the students at all the schools judged the level of feedback and interaction either "slightly more" or "much more" than in other courses of the same size.

As with any course, some students found the material dry; others were fascinated by it. Presentations that many judged to be "perfect" or "easy to listen to" and "at a good pace" struck others as "monotonous," "too rapid," or "too slow."

A large number of students commented on distinct advantages in the course structure, online delivery, and pedagogical design. One student in this group wrote:

I really enjoyed the online format because it allowed me to schedule the work myself. I was thus more efficient. I would definitely take another course in this format.

Another:

I enjoyed the online format and the organization of the course. I'd be interested in taking another course in this format. ... The presentations were pleasant to listen to and well-organized. The feedback problems were a great way to measure mastery of the subject and to focus thoughts and readings.

Several qualified their endorsement of the online structure. For example, one student wrote: "I would take another online course, but only in another course in which I had a great interest, since you have to be pretty self-policing about doing the work." Another observed, after complimenting the instructor: "I think it's important to have an experienced professor ... and [I] am not sure I would take such a course from [just] anyone."

But the course didn't work for everyone. Some discovered that they missed the stimulation and discipline of classroom meetings. One student expressed this reaction as follows:

I learned that I do not learn well in this environment. The process and procedure worked well, but I learned that I am a student that requires going to a class and

actually hearing the course material and the questions and answers. This is not the fault of the course, but rather my ability to learn under the circumstances.

Another expressed ground for preferring the more familiar classroom format was the way it organizes study time. Wrote one student:

I prefer to have a lecture where I know up front what portion of my time will be used to read and participate. I guess I like having my lecture, doing my reading, and being done for the week.

Forty-one percent of the responding students indicated that their regular approach to the online presentations involved pausing them for note-taking and reflection; thirteen percent generally ran them more than once. Wrote one student: "I would not pause the presentations as much as I would ... rewind them back a little to catch something I missed while I was taking notes. While it can be frustrating to try and take notes while having to stop and imprecisely rewind the lecture, it is a great benefit over traditional inclass lectures where you get it or you miss it." Eighty-three percent took advantage of the opportunity provided by the "hypermedia" environment to block and copy presentation outlines and "visited" portions of the Social Security act and regulations into their notes. Forty-eight percent said they did so "often".

Students appreciated the multimedia nature of the presentations. One wrote: "I thought it was great how when you listen to real player, it automatically opens the browser to the section we are discussing." From another: "I liked that the course window would automatically link to the relevant provisions of the act." A third (who found my voice monotonous) commented "the synchronization of the text and spoken content was excellent, and the popup window feedback was fantastic."

Two features of the online course structure continue to draw close to unanimous student endorsement: (1) the interactive problems coming at the end of each topic, which allow students to assess their own level of comprehension immediately after completing the readings and online presentations, and (2) the four mastery exercises spaced at equal intervals through the term.

About the former one student observed: "The interactive problems were great because they would get me thinking about the material I just read. Plus, I like the immediate responses to my answers. Thus I'll know if I missed something in the reading or not." From another: "The practice problems were my favorite part of the course. They were extremely helpful to see where I was with my level of understanding."

About the mastery exercises one student wrote: "The mastery exercises were good because they gave me a chance to see how much I actually understood the material – by applying it. The feedback memos were great." Another observed: "The Mastery Exercises provided a great means of assessing my level of understanding of the material. Your written responses and general comments helped a great deal in reaffirming what I knew and emphasizing areas I didn't quite understand. I feel exercises throughout the semester are critical in an on-line course such as this." A third: "The mastery exercises were the best thing you incorporated in this course. This forced someone like me (a

slacker in keeping up with the assignments, mainly due to obligations outside of school) to deal with the material so I could answer the questions, and in turn I learned at least something." Not always mentioned in these comments on the mastery exercises but implicit in the favorable response was appreciation of the generic feedback all students received by email 48 hours after the exercise deadline. One student gushed: "As I hit the send button, I really felt I had mastered the material. I could hardly wait until Wednesday to see if there was anything I missed, and seeing my answer on the ... email was very satisfying."

Students were of mixed views about the value of the online discussion area (to be distinguished from the material they submitted for programmatic or teacher feedback). A significant number of students, whether or not they participated in discussion, expressed positive views. But from others came views like: "People seem to post things just to see their own words and name! A lot of things posted went off on tangents and were not at all beneficial to me after I spent so much time reading through them." The asynchronous nature of the discussion and the fact that a few students were very active and swift to participate led some to a feeling of frustration: "I found it more difficult to participate, especially so when there was a wide variety of responses. With 85 people in the class, there were enough responses that were well thought out and prepared and researched as opposed to a class where I feel you can do the reading, follow along and add in a comment here or there." (In the controlled environment of the classroom a teacher can limit "gunners" by not always calling on them.)

Substantial numbers of students indicated that while having all of the readings for the course online was a great asset, they would have liked to have the option to acquire them printed out and bound at the beginning of the course. Several expressed the same view about the audio presentations, wishing they were available on CD for purchase at the beginning of the course which would among other things, they noted, permit listening to the lectures while commuting. Both would be possible at additional expense plus some sacrifice in the currency of the readings and presentations. I am contemplating change in this direction for next year. Another possible addition to which there was fairly widespread approval the questionnaire termed "real-time chat office hours".

III. Holding the course against Standard 306

Based on the quality of the student work, the regular monitoring of student participation and effort through weekly pre-discussion submission, the online discussion itself, and the four mastery exercises, we are confident the course meets the requirements of Standard 306(c). Cornell's LII shall offer the course again next year (spring term 2005). We hope to have all this year's schools participating again, plus one or two additions.