

Genesis of an Online Course

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Abstract

This paper presents a descriptive and evaluative analysis of the transformation of a face-to-face graduate tax accounting course to an online course. One hundred fifteen students completed the compressed six-week class in 2001 and 2002 using WebCT, classroom environment software that facilitates the creation of web-based educational environments. The paper provides a description of the required technology tools and the class conduct. The students used a combination of asynchronous and synchronous learning methods that allowed them to complete the coursework on a self-determined schedule, subject to semi-weekly quiz constraints. The course material was presented in content pages with links to Excel problems, Flash examples, audio and video files, and self-tests. Students worked the quizzes and then met in their groups in a chat room to resolve differences in answers. Student surveys indicated satisfaction with the learning methods.

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INTRODUCTION

The purpose of this paper is to provide information to educators who are considering transforming a face-to-face course to an online course. The paper discusses issues that arise in this transformation process, ranging from accommodating different student learning styles to technology requirements. In particular, the genesis of an online taxation of business entities course, from its initial planning to the student survey results for 2001 and 2002, is described and evaluated. One hundred fifteen students completed the required six-week course in the MS in Accounting (MSA) Program in the two summers. For most students, this class was their first introduction to both graduate work and an online environment. The students were accustomed to learning in an instructor-centered environment, and they were thrust into a student-centered environment in which the burden of learning was shifted from the instructor to them. Adjusting to a new learning style was not easy for most.

LEARNING STYLES

Leidner and Jarvenpaa (1995) describe learning models that motivate course delivery, and they state that although no particular model is the best approach, the instructor should be aware of the different learning models and use technology as a facilitator in applying a particular learning model. They describe two basic learning models of learning: objectivist and constructivist.

“The objectivist model assumes that an instructor should be in control of the learning environment (i.e., pace and material), that learning is dissemination of knowledge, that dissemination best occurs via abstract representations of the reality, and that learning occurs best in isolated settings (i.e., the context of the learning environment need not be ‘real’). Constructivism assumes that the learner needs to be in control of the learning environment, that learning is the creation of knowledge, and the realism of the context for learning needs to be high.” Collaborativism is an extension of constructivism, which “assumes that the control of the learning environment should rest with the peer groups, that learning is the sharing of knowledge representative of disparate points of view, that knowledge is personally experienced, but can be shared through collaborating, and that the realism of context is high in the sense that individual experiences prior to learning are real but low in the sense that the experiences are shared vicariously through discourse.”

The online learning environment is well suited for the collaborative model of learning. The content and pace of learning is under student control, subject to deadlines imposed by the instructor. The instructor serves as a guide in the learning process. The argument can be made that some accounting courses are simply bodies of knowledge that can be more efficiently transmitted through lectures. In such case, the instructor can use audio or video tools to record lectures, which students can access when they choose. Although the opportunity to ask questions is limited by the instructor’s availability online, the student can choose to listen instead of read the course material.

THE ONLINE ENVIRONMENT

Distance learning, of which online learning is one form, focuses on students who are separated in space from their peers and the instructor. Oblinger, Barone, and Hawkins (2001) use the term “distributed learning” for

both distance and campus instruction that uses technology to distribute the course. They state that distance and on-campus instruction are converging, with online delivery systems and approaches being employed for distant, commuting, and residential students. "This convergence of 'clicks and mortar' in the form of technology-mediated education is distributed learning"¹ Certainly many of the tools used in the online course described in this paper could also be used in a distributed learning course delivered on campus.

The demise of some for-profit online ventures calls into question the future of online learning. On January 7, 2003, Columbia University announced that it will shut down Fathom, its for-profit online-learning venture, which had been designed to sell Web-based courses and seminars to the public.² In 2001, other universities, including New York University, The University of Maryland University College, and Temple University, closed their for-profit ventures.³ The lessons we glean from these failures is the importance of aligning the program with the university's non-profit objectives and the need for faculty involvement. The *Chronicle of Higher Education* reported, "A. Frank Mayada, director of the Alfred P. Sloan Foundation's grant program of online education, said NYUonline should have sought more involvement from New York University professors in teaching and production. Instead many of the courses were taught by adjuncts with less expertise and teaching experience. 'It wasn't able to tap the real value of NYU, which is the faculty.'"⁴ Faculty involvement is crucial from the design to the delivery of the course.

Sherry (1996) stresses the importance of interactivity between teacher and students, between students and the learning environment, and among students themselves. Gagne and Shepherd (2001) state that it is a common belief that interacting with the instructor and/or with other students is somewhat hampered in a distance course. They quote Ryan (2000), who observes: "Interaction with the online instructor using e-mail, telephone, or chat demands greater efficiency than open oral discussion, and therefore is more limited. This is perhaps the greatest limitation of the online delivery method. Almost all online participants felt that this was the greatest weakness of the class." Gagne and Shepherd compared a face-to-face with an online class. The performance of students in a distance course was similar to the performance of students in the on-campus course for an introductory accounting graduate class. They also found that the students' evaluations of the course were similar, although students in the online course indicated that they were less satisfied with instructor availability than the in-class students.

Ponzurick, France, and Logar (2002) find that MBA students in a distance education environment tend to have a lower level of satisfaction with the distance education course than do students in a face-to-face environment. Students, however, elected to take the distance education courses because of convenience.

Online delivery was chosen for the MSA courses primarily for its flexibility. The MSA website states, "The ... Program has been designed to be flexible to accommodate a variety of students' interests and needs."⁵ In 2001 and 2002, students completed the MSA program by taking four 6-week courses in both the first and second summer and two 13-week courses in the fall semester. In 2003, all classes are 12-week classes. Some students do not work in the first summer, but after that most students work full-time. As accounting employees, they frequently miss live classes for many reasons, including being sent to various job locations around the state, having out-of-town training, and feeling pressure to work late to meet client deadlines. A combination of asynchronous (instructor and student not present at the same time)⁶ and synchronous tools in an online environment makes the classes more accessible and flexible for students. Although students may prefer the live classes, they cannot always attend the

live sessions. The online courses, however, are always available wherever the student has access to the Internet. In addition, many of the accounting firms provide online continuing education.⁷ Thus, students will continue to learn in an online environment in the workplace.

PLANNING

The initial planning began in December 2000, when the Accounting Department chair met with the Associate Vice Provost/head of Institute of Teaching & Learning and the Director of Instructional Media & Technology to outline a strategy for beginning the conversion of MSA courses to a distance-learning format. In January 2001, the instructor and course designer created a timetable for taking the taxation of business entities class online in summer 2001. Additional meetings were held during the semester to ensure that the selected teaching methods supported the course objectives.

The university provides its instructors with access to WebCT (Web Course Tools), classroom environment software that facilitates the creation of web-based educational environments. WebCT can be used to create entire online courses or to supplement existing face-to-face courses.⁸ The WebCT tools selected for this course facilitated the desired learning environment: a combination of asynchronous and synchronous activities that allowed students to complete the coursework on a self-determined schedule, subject to due date constraints.

In addition to WebCT, instant messenger software was used in the course.⁹ In the summer 2002 course, Placeware, synchronous conferencing software, was used for two classes. Placeware provides the ability to view spreadsheets interactively and to poll students, thus creating a more interactive environment. Using these tools, the class web site was developed and welcomed its first students in summer 2001.

STUDENT TECHNOLOGY REQUIREMENTS

Students must have certain technology available to them to be able to successfully work in an online environment. The MSA program director sent a letter to students detailing the general technology requirements.¹⁰ In addition, this course required the following software.

AOL Instant Messenger (AIM).¹¹ AIM was the most crucial communications tool in the course. Each student has a class “buddy list,” including that of the instructor. Whenever a student logs onto AIM, the student can see who is online, and contact other students or the instructor with questions.

RealPlayer.¹² The RealPlayer browser plug-in is needed to play the audio and video (*.rm) files created by the instructor to explain material. Creating the *.rm files is simple, but time consuming. Snag-it¹³ can be used to create initial audio (*.avi) file and then RealProducer is used to convert the audio files to *.rm files. RealPresenter is used to create video files of Powerpoint presentations.

Flash Player.¹⁴ This browser plug-in is required to view the Flash files, which demonstrated sequential problem solving. An alternative for demonstrating problem-solving techniques is to use Powerpoint presentations, but learning exercises created with Flash allow student interaction. For example, students can enter text, click buttons, or drag elements on a page. In addition, self-tests can be created with Flash, which can incorporate interesting sound effects to keep student attention.

Netscape/Internet Explorer Browsers. Students are asked to use both Netscape and Internet Explorer because one browser is used to access university library materials through a university proxy account, requiring special browser settings, while the other browser is used for regular web site access.¹⁵

STUDENT INTRODUCTION TO THE ONLINE ENVIRONMENT

To help students become comfortable with the WebCT online learning environment, students view a WebCT tutorial. The WebCT tutorial reviews the typical online tools, such as the discussion board, email, and chatroom tools, which are common to course environment software packages. The most useful tools in this course are the course calendar, content module, self-test, quiz, and grade tools.

Course Calendar. The course calendar provides a listing of the semester's activities, with the added advantage that the entries are clickable, enabling students to open the content module or quiz directly from the calendar. The calendar reinforces the time constraints. Seeing the due date of the first quiz on the calendar makes students aware that they must promptly start working with the material.

Content Modules. The content modules contain web pages with links to audio, video, Excel, and Flash files, which explain the particular topic, much like a textbook chapter. In addition, a project module contains two projects. An html editor (e.g., DreamWeaver) site management tool creates a map of all the files, which allows quick access to files that needed corrections or updates.

Self-tests. The content modules have related self-tests. Creating self-tests disciplines the instructor to focus on the learning objectives not only for an entire module, but for the specific content page, resulting in more focused pages.

Quiz Tool. The quiz tool creates quizzes and exams. In this course, the quizzes are discussed in groups, although each student must submit his or her own quiz. The quizzes create an incentive for students to meet the time constraints for learning the material and to work together in a chat room.

Grade Tool. The grade tool makes the students responsible for ensuring that the grades are correct. After WebCT grades the quizzes and exams, scores are automatically entered in the grade page. Once the quizzes have been submitted by all students, the grades are released, and students can click on the grade and see the graded quiz, including the solutions. The student's ability to see the correct answers with solutions allows learning to continue in an efficient manner. For example, if a student enters an answer that is correct, but WebCT was not programmed to accept that answer, the student asks the instructor to reconsider that answer. The student is responsible for ensuring his/her answer is correct. Thus, learning continues even after the class ends because students review their final exams to ensure that an error had not been made in grading.

CLASS CONDUCT

The taxation of business entities course covers the tax rules that govern the formation, operation, distribution, and liquidation of entities. At the end of the course, students should be able to identify and address the tax and nontax issues faced when choosing the tax form of business organization. This objective is accomplished through content modules, quizzes, projects, and exams.

Content Modules

The content modules include Property Transactions, C Corporations (regular corporations), and Partnerships. Because the life cycle of a business incorporates many of the concepts learned in the property transactions module of the undergraduate introductory tax course, the course begins with a content module on property transactions. This review enables graduate students who come from various schools to have the same baseline knowledge.

Students send instant messages when they have questions while they are working through the content modules. Answering a question with a question, rather than simply giving the answer, provides an incentive not to use the instructor as a source of answers. For example, asking students for a journal entry to record the transaction in question puts the burden of learning on the student. The emoticons in AIM can be used to convey humor when appropriate.¹⁶

Quizzes

Twice-weekly quizzes were completed by all students. Most students clamor for the module quiz before they start reviewing the module. Thus, the key concepts in the module require quiz questions to ensure that students cover the module material. To encourage students to work self-tests in the content modules, some quiz questions are patterned after self-test questions.

Following the collaborative model, students worked in small groups on the quizzes and projects.¹⁷ In summer 2001, the groups were created by the instructor and consisted of eight members for quizzes and four members for projects. End-of-semester surveys showed that students did not like this arrangement. In summer 2002, the groups consisted of six members and were the same for quizzes and projects. End-of-semester 2002 surveys indicated that students wanted to self-select into groups because of scheduling issues. To address this issue, in summer 2003, groups were created based on when students expect to work online, information provided in a survey at the beginning of the semester.

In the 2001 class, students were required to be in a chat room during the regularly scheduled class times. As the semester progressed, students objected to this practice. They wanted more flexibility in scheduling the times they worked with their groups. The requirement was dropped in 2002, but students were asked to attend two synchronous classes in conjunction with the projects. Audio or video recordings of the synchronous classes are available for students who cannot attend.

In the 2001 class, quiz due dates were Wednesday and Sunday; in the 2002 class, the dates were Tuesday and Thursday. Accelerating the due dates helped keep the class on schedule. In 2002, instructor online hours were during the scheduled class times, Mondays and Wednesdays from 12:30 PM to 4 PM and from 6 PM to 9:30 PM. On the other weekdays, I was online generally for an hour in the morning and back online between 1 PM and 9 PM, with a two-hour break at 5 PM. Now that the MSA program has moved from 6- to 12-week classes, instructor availability is more limited because students indicate on group board postings when they expect to work online, allowing more efficient scheduling of online time. Students also know when the instructor and class members will be online because they create “away” messages using AIM.¹⁸

The group members set up times to meet in the chat room. At the beginning of the semester, this time was usually the day the quiz was due. As the semester progressed, groups began scheduling multiple meetings. Most groups established a rule that each member had to work the quiz and come to the chat room prepared to compare answers. Generally, each group member would list the answers. If there were conflicting answers, each student explained his/her answer. If they could not resolve it on their own, they sent me an instant message asking me to come to their chat room. On the occasions when I was called into the chat room, I saw active learning taking place. The process was exhilarating from my perspective -- students were teaching each other. Although WebCT records the chat room discussions in the first four chatrooms, I did not review the logs during the semester. Subsequently, I checked some of the logs. The discussion in Exhibit I is from the log of a typical chat session.¹⁹

EXHIBIT I

Projects

The projects involve the preparation of spreadsheets reconciling book income to taxable income and the tax forms. For the 2001 and 2002 summer classes, face-to-face classes were held for projects, mainly because the university did not provide tax-forms software. The students met in their groups, and I circulated among the groups, answering questions. In summer 2003, there are no face-to-face classes; instructor-created Excel versions of the tax forms are now part of project spreadsheet files.

Exams

The only student-independent work required was the completion of two online exams. In the summer 2001 course, students took exams in the classroom. In the summer 2002 course, students took the exams online. The exams, which consist of short-answer and multiple choice questions, were taken during a set period of time on the exam day. The concern with possible collusion was alleviated by creating exams with random-order questions. In addition, the multiple choice questions had random answers. No restrictions were placed on the material that students could access, but the only permitted interaction was with the instructor.

STUDENT REACTION TO THE ONLINE ENVIRONMENT

At the end of each semester, the class was surveyed about the learning environment. The tabulated the results are reported in Exhibit II. One third of the student responses to questions on the videos (Exhibit III), synchronous classes (Exhibit IV), groups (Exhibit V), and online classes in general (Exhibit VI) were randomly selected and reported.

Tools in general. Questions 1 and 2 asked students which tools they used and whether they wanted more/less of the tools. Working the quizzes in the chat room was the method used most; 84 percent in 2001 and 67 percent in 2002 used a combination of these two tools “a lot.” The percentages for “a lot” for 2001 and 2002 were as follows for the remaining tools: self-tests (67%, 74%), Excel files (60%, 51%), AIM – student /instructor (58%, 56%), AIM – student/student (58%, 67%), Flash files (44%, 40%), audio files (33%, 42%), videos (40% 2002), discussion board (24%, 32%). Students did not use the discussion board as much as I had anticipated but instead

used other tools to get help. The use of RealPlayer increased from 2001 to 2002 as evidenced by 89 percent of the students viewing the videos, whereas only 72 percent used RealPlayer to listen to audio files in 2001 (no video files were available in 2001).

Students generally were satisfied with the quizzes and projects, although more students in 2002 relative to 2001 thought they should be reduced. 2001 students wanted more self-tests (65 percent). Despite the addition of more self-test questions, the 2002 students still want more self-tests (77 percent). The request for more Excel problems increased from 35 percent to 57 percent, and for audio files increased from 25 percent to 37 percent. The demand for more Flash files remained the same across the two years (22%, 21%).

EXHIBIT II

Videos. Question 3 asked if students found the RealPresenter videos useful; 66 percent of the comments were positive. Exhibit III reports student response regarding the videos. Thirty-four percent of the students did not like the videos for reasons ranging from duplication of content module material to problems getting the videos to play. I expect the technology problems to dissipate over time.

EXHIBIT III

Synchronous Classes. The class used audio conferencing in conjunction with Placeware. Question 4 asked how students accessed the synchronous classes. Eighteen percent of the students accessed the Internet through their phone lines, so they were not able to listen and be in the Placeware online classroom at the same time. Seven percent found the synchronous classes ineffective with audio only. Seventy-one percent had both audio and video, of which 60 percent were satisfied with the classes. Question 5 asked whether the classes were useful. Student responses are provided in Exhibit IV. Sixty-five percent of the comments were positive. The satisfaction percentage should increase as the instructor's ability to conduct synchronous classes increases. Question 6 asked how often synchronous classes should be held. Fifty-four percent wanted just the two classes; 28 percent wanted one-hour synchronous classes every week.

EXHIBIT IV

Technology Demands. Question 7 asks if student computers were able to handle the technological demands of the class. Most students indicated that the computer was not a problem, increasing from 56 percent in 2001 to 81 percent in 2002. The speed of the Internet connection remained a problem, although it decreased from 40 percent in 2001 to 19 percent in 2002.

AIM. Question 8 asked about AIM communication. Some of my students used AIM sporadically to contact me, but only one student did not use it at all over the two years. Most students were satisfied with their

interaction with the instructor, although satisfaction decreased from 78 percent to 68 percent. On the university-level survey, however, students rated the instructor over 9 on a 10 point scale.

Groups. Question 9 asked students about their groups. What surprised me the most was how much the students enjoyed working in groups, as evidenced by their comments in Exhibit V. Although the group process worked better in 2001 than in 2002, students generally were satisfied with their groups. Perhaps the fact that approximately 10 percent of their grade was based solely on group-member evaluations created an incentive to work with their group members. They then discovered that they could help each other improve their quiz scores (approximately 22 percent of their grade) and their project scores (another 22 percent of their grade). Thus, over half their grade was dependent on group interaction. The rest of the grade was based on the two exams.

EXHIBIT V

Online vs Live Class. Question 10 asked what would have to change to make the online experience a positive experience, and Question 11 asked if they would prefer to take the class live. Of the students in both 2001 and 2002, 56 percent would choose to take this class online if they had a choice between online and live. At first glance, this statistic looks grim, but recall that these students were just six weeks away from being undergraduates. The students found online learning challenging, as evidenced by their comments, some of which are listed in Exhibit VI. Part of their responses can be attributed to being thrust into the graduate environment with its attendant heavier workload. Perhaps they expected their old learning patterns to continue to work for them. In the fall 2001 semester, I taught tax research online to 19 of my summer online students. When asked in a survey how many would prefer to take the class live, only 3 said they would prefer a live class. Several students said they changed their mind about online education once they started working fulltime in the fall.

EXHIBIT VI

At the university level, an online evaluation replaced the paper evaluation used in live classes. The summary of the survey questions given to the instructor after the semester ended is provided in Exhibit VII. The survey results in 2002 for the afternoon class are not as high as the evening class or the 2001 classes. The student comments from both classes that accompanied the survey (not tabulated), however, were similar. In general, students appear to be satisfied.

EXHIBIT VII

CONCLUSION

The combination of asynchronous and synchronous materials in the WebCT environment worked well for my students. I felt closer to my students than I did in a live class. When I loaded AIM and saw my students online,

I felt connected to them. Each student had an online persona that blossomed over the semester. The use of emoticons in AIM helped us create bantering communication, which contributed to a less stressful learning environment.

The students appreciated the flexibility, and they liked not having to drive to classes. Although many of my students would have preferred a live class, they performed well in this online class. I did not attempt to statistically compare their performance with my past live classes, but the exam distributions appear similar to past classes. I was happy with the overall class performance.

One student concluded, “Just reading the material without having anyone explain it to you makes it more difficult to understand at first (at least for me). I waffled between wanting online and in person teaching Ultimately I chose online because this way we can do it at our own pace and we always have the ability to go back to where we might not have understood and do it over.” Thus, flexibility appears to outweigh what to the student appears to be an easier way to learn.

Perhaps the biggest impediment to moving to a learner-centered environment is instructor resistance to change. Distance learning has caused me to abandon the notion that I am central to the learning process. When I taught live, I was the focal point; in a distance setting, the student is the focal point. I am now much more comfortable with the collaborative method of learning, and I would use many of the online tools even if I taught live classes. Oblinger, Barone, and Hawkins (2001) state, “Until the educational process becomes learner-centered, in the classroom and at the institutional level, we may not realize the full value of distributed education. Distributed learning challenges our institutions not only to look at new ways of doing what we have always done, but also to look at doing new things. Should we use fewer lectures and invest more in collaborative learning? Would learning be more effective if we altered the lecture-laboratory-recitation model to a hands-on integrated approach? Students with an Information-Age mindset expect education to emphasize the learning process more than a canon of knowledge. They want to be part of learning communities, rejecting the broadcast paradigm of television (or the note-taker in the lecture hall).” Faculty involvement, however, is still necessary. Online learning is not a correspondence course; the faculty/student and student/student interaction is crucial to the learning process. Online tools can facilitate these interactions, helping the student to attain the course objectives in a flexible, self-paced environment.

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EXHIBIT I Log of a Partial Chat Session

The students are discussing the third, fourth, and fifth questions in a quiz. Semi-weekly quizzes averaged 15 – 25 questions, some with multiple parts. Although WebCT lists the full student name, only initials are used here.

MG>>Q3: 2
DM>>1
DC>>1
DP>>1
SS>>q3: 1??
MG>>that was one of the self test questions I think
DP>>2 needs to be partnership level
DP>>not partner
SS>>yep, I'm sure now. 1
AG>>right
DM>>i think it's 1 as well
DC>>me too
DM>>michelle?
MG>>I still think it's 2, I am looking up the self test that I got it off of the double check
DP>>in the self test it says partnership
AG>>yeah, I think it does
MG>>you're right
SS>>yep, character is determined at partnership

DM>>Q4: 3??
DC>>5
SS>>I got 3 as well
AG>>3
MG>>3
DP>>3
DM>> $85,000(.30) + 12,000 = 37,500$
AG>>right
DC>>I screwed up, didn't multiply the 1000 by 12
DC>>so 3
MG>>y

SS>>I'm not sure on 5
MG>>Q5: 4
DM>>Q5: 2??
DC>>3
AG>>4
DM>>not sure at all
DM>>ha- all different!
SS>>amy, michelle, how'd you get 4?
MG>> $80-5+6$
AG>> $80000-5000+6000=81000$
DP>>i have that too
DC>>why deduct the 5000?
DM>>what about the guaranteed payments
AG>>because those two items are excluded from ordinary income
MG>>they are added back in for taxable income
MG>>that gp that is
DM>>oh ok
AG>>the gp is already included as a deduction
DC>>why did you subtract the ltcg?
DC>>never mind, it's not ordinary income
DM>>i thought it was not included
AG>>it's excluded from ord inc
MG>>it goes on Sch K, I think
SS>>so the charitable is deducted at the partner level, right
AG>>yeah
DM>>y
DC>>yeah, I see it now
MG>>yes
SS>>ok, then I agree with 4

EXHIBIT II End-of-Course Survey

1. Each blank below is for a learning method you may have used in this class. How often did you use each method?

	2001 (N = 55)			2002 (N=57)		
	1 (Never)	2-4	5 (A lot)	1 (Never)	2-4	5 (A lot)
Working through the content modules on the internet (as opposed to printing them out and working from paper).	2%	31%	67%	2%	42%	56%
Printing out the web pages and working through the paper version	29%	33%	38%	16%	30%	54%
Working the self-tests	2%	31%	67%		26%	74%
Working the examples and problems in Excel files	2%	39%	60%		49%	51%
Viewing the Flash files	11%	45%	44%	2%	58%	40%
Listening to sound files	29%	39%	33%	9%	49%	42%
Working the quizzes with my group in the chat room	2%	15%	84%	5%	28%	67%
Using AIM to ask the instructor questions	2%	40%	58%	2%	42%	56%
Using AIM to ask another student questions	2%	40%	58%		33%	67%
Using the discussion board	5%	71%	24%	2%	67%	32%
Watching RealPresenter videos				11%	49%	40%
Attending synchronous classes				4%	54%	42%

2. What should the instructor do to improve the course with respect to each of the learning tools:

	2001				2002			
	Get rid of it	Provide less	OK	Provide more	Get rid of it	Provide less	OK	Provide more
Web pages in the content modules			64%	36%		2%	65%	33%
Self-tests		2%	33%	65%			23%	77%
Excel examples and problems		4%	62%	35%		4%	46%	51%
Flash files	11%	20%	47%	22%	2%	18%	60%	21%
Audio files	20%	16%	38%	25%	7%	11%	46%	37%
Quizzes		7%	82%	11%		28%	61%	11%
Projects			89%	11%	2%	19%	67%	12%
RealPresenter videos					4%	18%	37%	42%
Synchronous classes					4%	23%	40%	33%

3. If you didn't watch the videos, why didn't you watch them? If you did watch the videos, were they worth your time? Would you like to have videos for all the content modules? How would you change the videos? (Student responses are listed on Exhibit III.)

	2002
A. Helpful	27%
B. Helpful – want more	27%
C. Positive with suggestion	5%
D. Positive with criticism	7%
E. Negative	34%

4. With respect to the synchronous classes, which of the following applies to you.

	2002
I used audio only. The audio enabled me to get what I wanted from the synchronous class.	11%
I used audio only. Not having access to video made the class ineffective for me.	7%
I used audio and video, but I was not able to keep up with the class.	11%
I used audio and video, and it worked just fine.	60%
I didn't attend the classes, but I did listen to the recorded audio files of the classes.	7%
I didn't attend the classes, nor did I listen to the recorded audio files of the classes.	5%

5. If you didn't attend the synchronous classes, why not? If you did attend the synchronous classes, were the classes worth your time? (Student responses are listed on Exhibit IV.)

	2002
A. Positive	44%
B. Positive with criticism	21%
C. Negative	14%
D. No time to attend	12%
E. No feedback responses	9%

6. How often should I hold synchronous classes?

	2002
Don't hold any synchronous classes	4%
Once a week for one hour	28%
Once a week for 1 1/2 hours	5%
Once a week for 2 hours	2%
Twice a week for 1 hour	4%
Twice a week for 1 1/2 hours	2%
Twice a week for 2 hours	2%
Just for projects (twice a semester)	54%

7. I am concerned that the online experience may not have been a good one for some of you. It is possible that your computer was not able to handle the technological demands of this class. Which of the following describes your computer? Check all that apply.

	2001	2002
I had to frequently reboot because files wouldn't display.	15%	5%
I shared a computer with others so I didn't always have access to the computer.	11%	5%
My internet connection bumped me off frequently.	27%	9%
My internet connection was too slow.	40%	19%
I liked working on computers on campus, but the computer locations were closed when I wanted to be there.	9%	5%
My computer worked fine for me.	56%	81%

8. Some of you did not interact very much with me on AIM. I am concerned that this lack of interaction may have negatively impacted your view of an online course. I would like to know why some of you chose not to contact me. Choose all the reasons that apply.

	2001	2002
The instructor wasn't online when I was online.	5%	7%
I don't like using AIM	7%	9%
I didn't realize that I could contact the instructor by AIM	0%	0%
I figured I could learn the material on my own without the instructor's help.	7%	14%
The interaction with my group members was sufficient.	40%	32%
I just didn't have time to interact with the instructor	4%	9%
I would have interacted more, but I didn't always have access to an online connection at home (e.g., family members/household members were using computer).	15%	5%
I was satisfied with my interaction with instructor.	78%	68%

9. Tell me about your group. What made it a good group or a not so good group? Is there anything I could do to help the group learning process? (Student responses are listed on Exhibit V.)

	2001	2002
A. Positive comment	80%	54%
B. Positive with suggestion	4%	18%
C. Positive with complaint	15%	18%
D. Suggestion only	2%	5%
E. Negative comment		5%

10. What would have to change to make the online experience a good one for you? (Student responses are listed in Exhibit VI.)

	2001	2002
Fine as is	33%	37%
Online learning is harder	15%	5%
Better online access	11%	5%
Need more time	6%	9%
Less of something	6%	9%
More of something		11%
More live classes	13%	4%
Teach the class live	9%	4%
Miscellaneous comments	7%	12%
Print out notes		5%

11. Knowing what you know now, back up to day one. If you could choose to have a live instructor in a classroom or take this class online, which would you choose? Assume that the live classes would be for 3 1/2 hours twice a week. The live classes would be a combination of lecture and active learning.

		2001		2002	
		Live Class	Online Class	Live Class	Online Class
		44%	56%	44%	56%

EXHIBIT III
Student Video Comments – Summer 2002
(Instructor's name converted to INSTRUCTOR)

A. Helpful

1. I thought they were worth the time to watch. I think they clarified some gray areas. They helped because sometimes you would explain it a different way than it is written and it is easier to understand.
2. I watched the beginning videos and they were helpful. Towards the end of the semester I guess I got lazy and just worked the problems from the quizzes from the modules
3. I watched almost all the videos and listened to all the sound files you created. It's extremely helpful. There are some concepts, such as NOL or limitation on charitable contribution; it is difficult to explain the different ways in writing. A sound file from INSTRUCTOR clears everything up. I listen to the sound file and write my own note on the side...it's perfect! However, I don't think you need to make videos or sound files for everything, just on some particular important or complicated areas.
4. I thought that the videos were very helpful; they were definitely worth my time. I don't think they are needed for every module. I would prefer videos to a synchronous class, because it is much more convenient.
5. The videos were decent... I primarily still worked off of the written pages in the content modules for doing quizzes and projects, but it definitely helps to have some things explained, especially the more difficult topics. It helps to reinforce the concepts. I say keep them.

B. Helpful - Want More

1. I think I would have a video before each module. It provides a framework to tackle the modules so you have a better of idea of what the information is about.
2. I would like to have videos for all content modules.
3. I thought the videos were very useful in the beginning. However, since they weren't available for all modules, I got in the habit of using the content modules more intensely instead of the videos, and therefore stopped using them in the second half. I think if I had been smart enough to use them the whole time it would have been very helpful, as the first ones were.
4. Yes, the real presenter videos were very helpful. It helped to explain some things that were difficult to learn using the content module alone. Videos in all the content modules would have been helpful.
5. Videos for all of the content module would be helpful to learn a little faster for the 6 weeks we have.

C. Positive with suggestion

1. The videos were worth my time. However I think that maybe just giving everyone the slides you show might work too and be less time consuming.

D. Positive with criticism

1. I watched most of them and thought that they were very helpful when I did get to view them. However, I often ran out of time with all of the work to get done for this class and my other class. I think that they are great to have with the content modules but only if I get to print out the modules so that I can compare them to the videos and follow along to take notes. Also, it is good to mention that they can be done in line with the notes rather than after because I didn't know that, and it would have saved time.

E. Negative

1. I didn't find the videos that helpful. I only used them as a back-up if I didn't understand something that was on the content module. All of the explanations were not needed.
2. I find it difficult to learn that way. I find it easier to read the content modules and to follow the sample problems.
3. I didn't watch the videos because I couldn't get my real player to work and I didn't find them necessary.
4. I didn't have the opportunity to watch as many videos as I would have liked because my computer is not a big fan of real player. It kept making my computer freeze.
5. I didn't watch the videos because I couldn't get the picture to view on my computer.
6. I didn't watch them, because I felt that my time was better spend redoing quizzes, talking over stuff with other students and INSTRUCTOR, and studying the content modules. The selftests really helped a lot too, because I could see what I was doing wrong.

EXHIBIT IV
Student Synchronous Class Comments – Summer 2002

A. Positive

1. I attended one and it was helpful. The second I was out of town and could not attend.
2. Yes, the synchronous classes were worth my time. It saved my group time when starting the projects because things looked familiar and made sense. Without the synchronous class, the projects would have been more difficult and less meaningful.
3. The synchronous classes were helpful for project explanations. It gave a taste of what was to be expected about the project. The class not only explained the project, but it was a way to tie information we were learning to the project and apply the information. It was definitely worth it, because it made the projects look less intimidating than if there were no explanation of what was to be expected.
4. I attended the classes and I think they were worth my time. I was able to get input on the project and ask questions. Sometimes, it's easier to do it that way than through IM.
5. They were definitely worth my time...helped a lot.
6. I was only able to attend the 1st synchronous class, but I found it worth my time. It really helped to get a start on the project, which seemed rather overwhelming at a first glance.
7. Yes they were worth my time because it helped walk through the projects, and I feel can be helpful for the quizzes or problems in the content module. It will allow people to be walked through problems that are difficult.
8. I thought they helped although having them too often would be too much of a time strain.

B. Positive with criticism

1. The first one was definitely worth my time, but I felt that the second one was a little too long to continue to retain all the new information that was given to us.
2. I was audio only. The first class was very good even without the video because you covered the spreadsheets and provided instructions for the project. The second class was ineffective because I could not follow along and I did not receive instructions for the project, which is what I was expecting. It was very frustrating.
3. I thought that the synchronous classes were helpful, but somewhat lengthy. I would have liked them better if we could have done the same amount of material in a shorter period of time.
4. The first class I attended I had both audio and video and that was worth my time. The second class however I only had audio and because SNET is a HORRIBLE internet provider, I couldn't even access the uconn webpage, so I was pretty much lost the whole time. I think they're only worth it if you have both.

C. Negative

1. They were not very helpful. It made me more confused. I learned a lot more working with my group members and through AIM.
2. They got me very confused

D. Did not attend because student had no time

1. Busy
2. I couldn't attend at the scheduled times. But I could get access to them later.

E. No feedback responses

1. Yes

EXHIBIT V

Student Group Comments – Summer 2001

Tell me about your group. What made it a good group or a not so good group? Is there anything I could do to help the group learning process?

A. Positive

1. We all got along very well, and were always willing to help each other. We also each were always prepared and contributed.
2. I think we had a really good group because everyone was flexible and generous with their time. We were almost always able to meet as a whole group outside of class at least twice a week. We used the chatrooms extensively and did not move on until everyone in the group was comfortable with the material. I think we had a really good synergy. INSTRUCTOR, I think you did a lot for our group in that you were available on IM almost always and came to our chatroom when we needed you. It's a difficult medium, and I feel you were there for us as much as was possible.
3. The second half of the course everyone really pulled together and the team dynamics were much better. We were able to analyze the quizzes much better and Project 2 went much smoother. I was very pleased with our group's participation with each other. You really helped out with the project by going through why we do each step instead of just giving us an answer. By making yourself visible during class time and throughout other days, my group was able to contact you with questions, which made this much better.
4. My group was great. Everyone made an effort to coordinate meetings online or in person if necessary. We did all of the quizzes together and learned a lot from each other.
5. I really liked my group. They were fun to work with and very helpful on the quizzes. It was a good group.
6. The best thing was that every one was very nice and we all worked together very well. Also, it was very easy to ask someone to explain something to you that you were stuck on. My group members would help each other out until we understood what we were stuck on. Time was never an issue.
7. The group worked well, with meeting personally for the projects and in the chat rooms to go over the quizzes. Well, I found myself not only working with the people in my group a lot, but also with other people in other groups a great deal, especially in the overlapping chat rooms.
8. All of the group members were willing to help each other out--answering questions, explaining concepts, etc. Everyone was flexible, as well. I think using my classmates as resources was a great way to learn in a non-traditional, web-based environment.
9. My group was very good. We all helped each other out. We worked well together. I think you handled the group learning process well. It was hard, but there isn't really anything better to do.
10. For the most part, we could all meet at the same time to discuss the quizzes. Our schedules were pretty similar. When doing the project forms, at least one person seemed to know what they were doing on both projects (that was a good thing btw). Although some were slower than others when it came to the learning process, I did not feel as though there was any free riding going on.
11. Great group...worked well together...no complaints
12. We worked well together when we met in class for the projects. We also made strong efforts in chat rooms during the quizzes.
13. This was a great group to work with because everyone was approachable and ready to help each other. We were able to find times to meet to discuss homework, and if someone couldn't be there, the person would receive emails about what we discussed and our rationale. In online courses like this, it seems the best thing for the Prof. to do to help the group learning process is to be available online when groups are meeting (to the best of your ability)
14. My group was great. Sometimes there were group members who didn't contribute and just waited for the answers but it didn't happen all the time so that is OK. My group really helped with my learning process.

B. Positive with suggestion

1. Good group, nice people. Maybe more chatrooms at first would facilitate easier discussion until people get used to the chat room format. More rooms would mean less talking at once and force participation from everyone remaining.

C. Positive with complaint

1. This group was great from the start with the exception of one absent member. We got along well and managed to match our schedules so that we could do our homework. Sometimes, though, it is not possible for everyone to meet, but everyone, except for one, managed to meet most of the time.
2. My group was good because we were able to get things done effectively. It could have been better if I was able to get a firmer grasp of the material before group meetings.

D. Suggestion only

1. Make groups according to people's outside schedules, if possible.

Student Group Comments – Summer 2002

Tell me about your group. What made it a good group or a not so good group? Is there anything I could do to help the group learning process?

A. Positive

1. The group was great. Everyone was an equal contributor.
2. We had a great group. Every Tues. and Thurs. we had a set time where we would meet in the chat room and go over the quiz. Everyone was also willing to meet together to do the project.
3. My group was great; everyone gave 100%.
4. I thought my group was great. We worked very well together. I also think it was amazing the amount of diversity that went on in who "lead" the group. Everybody picked up their strong suits and gave it to the group. I was blown away at how well, everyone contributed almost all the time.
5. I think my group was awesome. I don't know what I would do without them. They definitely helped me a lot in my learning process. Five heads is always better than one. Everyone tried their hardest to participate and to contribute to the learning.
6. I though we had a very good group, we did the quizzes together and people were very helpful with explaining things if someone didn't understand
7. It was a nice group. Every member contributes his best to group work.
8. My group was good because we met on a regular bases and were always willing to help each other.
9. I liked my group. I think it was really helpful to bounce ideas off of each other.
10. I think the group thing worked out great. We didn't meet as a complete group but as 3 or 4 at a time due to different schedules. It would have been hard to find time for all of us to meet so making it pretty open was good.

B. Positive with suggestion

1. Group was fine but had various schedule conflicts. I personally did not mind doing it all alone but certainly agree with the learning process as a group.
2. The group was great. Generally there is one or two people who don't carry their weight and that wasn't the case (of course there is always one wierdo on the bus and when I get on I can never find him). There were some issues with meetings but for the most part it seemed to be unavoidable problems because we are so busy and the amount of work in a short time is difficult. overall this group worked very well together. I enjoyed the online meetings; however if you want to facilitate better learning have 2 attended classes for each project: one to work in the group on it and the other to turn in a final project. The class we had to turn in the project was good; however there was little time to interact and compare projects.
3. I really enjoyed the people in my group. However, one thing I think you should take into consideration next time around is the differences b/n full-time students and full-time workers/students. Including myself, there were 2 people out of 5 who didn't work full-time. The only times we could meet were after 8 to accommodate the full-time workers. Not that I mind, but often times students who work full-time are concerned with "getting by". That happens with full-time students too but not as often. The full-time workers in my group didn't want to get together to work on projects together. I really need that interaction to get through the projects. Basically, I think that you should group full-time workers together, and group full-time students together.

C. Positive with complaint

1. I think we had a good group, but it was very time consuming to go over the quizzes on-line.
2. I don't think groups should be expected to communicate as much as they were expected to. I believe that some people learn better on their own and then are able to help group members once they learn the material themselves. A good group is always there to help each other and knows how to give and take. I liked communicating with my group using im.
3. I liked all of my members. My one frustration was that we had a set a meeting time of Monday and Wednesdays at 8 pm and we never once met at that time. It was frustrating, because with my busy schedule I needed to plan ahead of time and often I counted on the Mon/Wed meetings and they got changed because people were not ready. The group itself did facilitate learning. We often corrected each other's mistakes and hashed out difficult problems together. It would be nice if we could use the conference call set up for group meetings - typing takes a long time.

D. Suggestion only

1. Maybe make one set of groups that consist of people living at UCONN for the summer so that way they can meet in person for quizzes and projects if they'd like, it makes learning easier because typing on IM gets time consuming and harder to explain how things work.

E. Negative

1. I think that to help the group learning process, people should be allowed to pick their groups. I just think that our group got off on the wrong foot from day 1 and it made everyone less willing to contribute. When there is one person who always says you are wrong, you become less likely to want to contribute. I think that happened with our group, at least I know I feel that way. What made it worse is the fact that the person who said things were wrong had no explanation as to why. It was like they just wanted to argue.

EXHIBIT V

Student Online Class Comments – Summer 2001

What would have to change to make the online experience a good one for you?

Fine as is

1. I love online classes.
2. I enjoyed the flexibility that the on-line course afforded me. It made life easier because I work full time. You (INSTRUCTOR) were always available to answer questions, and responded quickly to emails. I am in awe of the amount of time and effort you put into this class! I think you did a great job, and I learned an immense amount in this class.
3. I am really satisfied with this class (except my laptop freezes almost every time when I am online. Tonight, it froze 2 times already :- (Professor INSTRUCTOR has worked HARD to help us learn as much as possible. She is just a wonderful and best professor--I couldn't resist her a great funny spirit and smile :-)
4. I enjoyed it. It was the material that frightened me.
5. Nothing.
6. Nothing

Online learning is harder

1. Just reading the material without having anyone explain it to you makes it more difficult to understand at first (at least for me). I waffled between wanting online and in person teaching in [online vs live] question above. Ultimately I chose online because this way we can do it at our own pace and we always have the ability to go back to where we might not have understood and do it over. The self tests were very helpful, as well as the numerous examples provided in the modules. I'd say this WAS a good experience for me. :-)
2. I was opposed to the online experience at first. But after getting used to it, I really like it. It is a very convenient way to learn, especially when taking grad classes. The only negative aspect is that sometimes it was difficult teaching myself the material. Interacting with students and the professor over AIM is not the same as interacting in the classroom. Unfortunately, I don't think there is a way to include the old-fashioned personal interaction with an online class. I think meeting in groups in person in Hartford a couple times to work on the projects was a good idea.

Better online access

1. I definitely need an upgrade to my computer. If my computer wasn't so slow, and my internet connection wasn't horrible the experience would have been better. The experience itself was good for me, especially the format you set up - meeting w/ my group, and having constant contact with you - but my computer frustrated me a lot! I was very nervous at the start because I had never done anything like this, but overall I would recommend online courses for the future because of the flexibility the system offers.
2. To do the work, you need about a thousand windows up, which makes the memory issue at home a real pain. I should have come to class to use the machines, but I found the classroom distracting with the discussion groups and all. Every time I did come to class, I would try to get into the assignment, I would feel guilty about not getting into the discussion group so I would get in (discussion group) there and be over my head because the assignment wasn't done yet (I scheduled my day to do it in class.) For the ones just graduating from school with the summers off, I'm sure it was fine because they had the time. I however, was taking another class in the eve... and my time was constrained. In short, I thought you were really fun and I wish I had taken class with you as an undergrad. It would have been fun. I thought the on line was interesting because it forced the student to understand the material. Unfortunately, if you're not connected to the university mainframe, it's a technical nightmare. Either that or I need a new computer (it's on order) Thanks again for everything - it was a wild ride. Have a good summer and watch out for the religious zealots who force you into a square you're not comfortable with. Traditional religion is dogma for kids. As adults, it's our duty to blaze our own trail. It's incumbent upon us to ask questions, push the limit, and make our own roadmap rather than blindly following someone else's. Not that you would :)

Not enough time

1. It was an overall good experience. Though it was a little overwhelming at first I feel as though I got a lot out of it. The negative feelings I have about the class are mostly due to the workload and short time span. However I realize that the negative is due to the fact that it was a condensed class, not that it was on-line.

Less of something

1. There should be less grade impact from participation. Some people learn differently than others, and those who choose to learn independently should not be negatively impacted for it. Otherwise, the online course experience was wonderful.

More live classes

1. I guess just a little more interaction in the classroom. I would have preferred that you lectured a little and then let us on our own to do work and read through the modules, quizzes, etc.
2. It should have been more gradual. Maybe start off with some classroom instruction and then work to combine the two throughout the semester. I prefer live instruction. I find that an instructor working through difficult problems helps me to better understand the material.

Teach the class live

1. This class would have been much better had it not been an online class. I don't think any student can successfully teach themselves taxes and I think you miss out of a lot of stuff you could have learned by having this class online.

Miscellaneous comments

1. I would like to not have to be logged in at 6-9 on Mondays and Wednesdays, and just take care of things on other more flexible times.

Student Online Class Comments – Summer 2002

What would have to change to make the online experience a good one for you?

Fine as is

1. Nothing. I enjoyed it, and I feel like I learned a lot more compared to other classes I've taken that were live.
2. I thought that generally the experience with this online class was a good one. However, I feel that you are an excellent professor and I kind of feel that I missed out on some things in that respect.
3. I liked the online course
4. The experience it self was not bad at all, tax in general is just very difficult!!!
5. Nothing really, it was an enjoyable experience.
6. Nothing. I enjoyed it. :-)
7. Nothing. This was a really good experience for me. I learned a lot. I wish that all classes were structured this way.

Online learning is harder

1. It was rough getting used to it, but once I figured it out, I found it to be a good experience - a learned a lot about computers! You just have to try to be patient, even though it's not easy when things are moving so fast. Warn students to be patient! Overall, I would say nothing has to be changed but the individual's attitude toward an online course.

Better online access

1. I would have gotten DSL earlier, some times my internet connections (10 kb/sec) just wasn't worth it. As to the content of the course itself, I think it was fine.

Not enough time

1. I wish I had more time so that I can really understand the material...but there is not much that can be changed to get that.

Less of something

1. It would have to be less time consuming

More of something

1. I think that if there were more synchronous classes and videos this would help the experience.
2. I think more video explanations with you talking would be more helpful, but I thought I had a good experience overall.

More live classes

1. More live classes

Teach the class live

1. Make it not online, but I guess that's not possible! I don't know if I could have a good online experience. I am a very visual learner, so I remember examples and other things that professors write on the board and explain, and that just isn't possible in an online class.

Miscellaneous comments

1. Make it more coordinated because some people everyone would be working on this class at different times and it was difficult to get live feedback
2. I'm not sure at this time!

Print out notes

1. Have the lecture notes printed out for us.

EXHIBIT VII
University Course Survey Results for 2001 and 2002

		Summer 2001 Means		Summer 2002 Means	
		First Class	Second Class	First Class	Second Class
1.	Presented course and material in a clear and effective manner	9.3	8.9	8.5	9.3
2.	Overall organization	9.4	9.4	9.0	9.5
3.	Made the objectives of course clear	9.5	9.3	9.1	9.6
4.	Fulfilled course objectives	9.6	9.3	9.1	9.7
5.	Clarified work assignments and student responsibilities	9.5	9.2	9.1	9.6
6.	Stimulated interest	9.3	9.1	8.5	9.5
7.	Graded fairly and impartially	9.7	9.7	8.6	9.8
8.	Use examination items which stressed important aspects of the course	9.7	9.5	8.9	9.5
9.	Accessibility to students both in and out of class (if online course, evaluate on instructor's overall accessibility in this course.)	9.9	9.9	9.3	9.7
10.	Instructor's interest and concern for students	9.9	9.9	9.2	9.9
11.	Preparation for each class (if online course, evaluate on instructor's overall preparation for the course)	9.8	9.9	9.5	9.7

¹ Oblinger, Barone, and Hawkins (2001) state, “Distributed learning extends the opportunities for interaction between faculty and student, incorporating simulations and visualizations, as well as collaborative learning. In fact, the “anytime, anyplace” nature of this new set of electronic educational opportunities may well have its greatest impact on residential education. Not only does distributed learning occur anywhere and at any time, but these conditions can be modified along a number of dimensions. Customization may hinge on differences in learner backgrounds or variation in basic academic preparation. The learning experience also may be tailored to accommodate those with learning disabilities or alternative learning styles. Distributed learning environments may augment traditional instruction through reinforcement—by providing the opportunity to explore a subject in much greater depth, allowing learners to study the material on their own time, or to gain additional experience outside of the defined classroom times or homework assignments. In distributed learning, the learning experience is no longer bounded by the length of the class session.”

² <http://chronicle.com/infotech/> on January 7, 2003.

³ SUNY-Buffalo dropped its online MBA program in 2002, but this program only operated one semester with two pilot courses. See *The Chronicle of Higher Education*, March 8, 2002, p. A31.

⁴ *The Chronicle of Higher Education*, December 14, 2001, p. A31

⁵ <http://www.sba.uconn.edu/Accounting/Programs-Degrees/MSinAcctg/>

⁶ See <http://www.wested.org/tie/dlrn/course/glossary.html> for an online dictionary of distance learning terminology.

⁷ See, for example, <http://www.deloittelearning.com/>, a website dedicated to providing online courses to directors, senior management and others involved in the governance process.

⁸ Online sources are available to learn how to use technology tools to create course content. For example, Smart Planet (www.smartplanet.com) offers DreamWeaver and Flash classes, which allows one to experience being an online student and to learn technology skills in the process. The Accounting Education using Computers and Multimedia (AECM) listserv (<http://pacioli.loyola.edu/aecm/>) and the WebCT mailing list and web site (www.webct.com) are also useful, as is Robert Jensen’s website (www.trinity.edu/rjensen). Robert Jensen was a 2002 recipient of the American Accounting Association’s Outstanding Accounting Educator Award. His website was featured as a sharing and helper site in *The Chronicle of Higher Education*, August 14, 1998, page A25.

⁹ Based on prior research’s finding that instructor/student interaction can be perceived as inadequate in an online environment, I wanted to ensure that students perceived me as being available to them. I was not convinced that the problem was the distance between teacher and student, but rather the immediacy of the response to the inquiry. AOL’s instant messenger (AIM) was chosen because it is a common instant messenger used by students.

¹⁰ At the time, the requirements were as follows: Processor – Pentium II or equivalent running at 266Mhz or faster; RAM 284MB minimum; CD ROM 6x or better; 56KB modem (or cable modem, or DSL capability); Audio capability and microphone (this entails a separate audio card, or on the newer machines, audio on the motherboard); Video card with 32MB RAM. Beginning summer 2003, students must have cable or DSL access to the web.

¹¹ <http://www.aol.com/aim/>

¹² <http://www.real.com/player/>

¹³ <http://www.techsmith.com/products/snagit/>

¹⁴ <http://www.macromedia.com/shockwave/download/>

¹⁵ I include the following browser instructions: To use all the tools in WebCT your browser must be Java-enabled. In Netscape, click on Edit, Preferences, Applications, Java and Java script enabled. In Internet Explorer, click on

Tools, Internet Options, Advanced, JIT compiler for virtual machine enabled (under Microsoft VM). If you do not see something you just posted, your browser may need its cache setting changed. In Netscape, click on Edit, Preferences, Advanced, Cache, Every time. In Internet Explorer, click on Tools, Internet Options, General, Settings (in the Temporary Internet Files section), Every visit to the page.

¹⁶ The first time I realized the importance of the emoticons was when a student asked for a quiz extension, and I said no. He responded with 😞. I responded with 😞. After a few more exchanges, we finally ended with 😊.

¹⁷ Online education is especially effective in helping students from different cultures work together. Although the posts may not be written in perfect English, the posts reflect the students' perspectives on the issue at hand. As students gain confidence in each other, they are more willing to "speak" out. One group had a Polish female, a Romanian female, and two Anglo American males, one of whom was a law school student. Both females were reticent, having recently arrived in this country. When we met live for the first class, I was concerned about this group because the male law school student was absent, and the remaining three members were very quiet. The next week the Polish female had to return temporarily to Poland. Nevertheless, all group members continued to work together electronically. When the groups met live for the first project, my concerns were allayed because I could see how easily the students were working with each other.

¹⁸ The message can be read by right-clicking on the name in the buddy list, and then clicking on "Get Buddy Info."

¹⁹ As the semester progressed, the students used a lot of typing shortcuts and acronyms, such as "tlyl" for talk to you later or "lol" for laughing out loud.