

Genesis of an Online Course

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Synopsis

This paper presents a descriptive and evaluative analysis of the transformation of a live 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 first-day activities, which introduced the students to the online environment. 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 bi-weekly quiz constraints. I used Dreamweaver to create content pages, which had 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. When students wanted my help, they sent me an instant message, using AOL Instant Messenger. At the end of the semester, I surveyed the class about the learning environment. Overall, the students were satisfied with the learning methods. The group process worked well in this class; student comments on their groups and the class are provided in exhibits. In addition to having technology problems, students found discovery-based learning challenging. The problem, however, was not my accessibility to them. On a university-level administered survey, students rated my accessibility over 9 on a 10-point scale, which I attribute to the use of an instant messenger program. Based on the student comments, those who preferred the online environment appreciated the flexibility. Given the choice of live instruction versus flexibility, students choose flexibility, particularly once they start working fulltime.

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The University of Connecticut (UConn) graduate course, ACCT 371, Taxation of Business Entities, was taught online the first time in summer 2001. This paper presents the genesis of that course, from its initial planning to the student survey results for 2001 and 2002. The course is a required course in the MS in Accounting (MSA) Program. One hundred fifteen students completed the course in the two summers. Most of the students graduated the prior weekend and began class the following Monday. Thus, this class was their first introduction to graduate work and an online environment.

Why Online?

The UConn MSA website states, “The UConn MS in Accounting Program has been designed to be flexible to accommodate a variety of students' interests and needs. The part-time program, which can be completed in 16 months, provides a wide range of summer course offerings. This minimizes the coursework taken during fall and winter” (<http://www.sba.uconn.edu/Accounting/Programs-Degrees/MSinAcctg/>). Beginning in summer 2003, the MSA courses will all be taught over 12-week periods, with no courses offered in the spring semester. Some students do not work in the first summer, but after that almost all students work full-time. As accounting employees, they are sent to various job locations around the state, and as a result they miss class frequently. A combination of asynchronous and synchronous tools in online environment makes the classes more accessible and flexible for students. Although students may prefer the live classes, they cannot always come to the live sessions. The online classes, however, are always available wherever the student has access to the Internet. In addition, many of the accounting firms provide online continuing education for their employees. Thus, students will continue to learn in an online environment.

Planning

The initial planning began on December 21, 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. On January 12, 2001, two accounting instructors and several UConn course designers met to discuss a timetable for taking the first two MSA courses online in summer. The instructors continued to meet with a designer several times during the semester to ensure that the teaching methods we chose supported the course objectives.

I have taught a business entities tax course since 1989, both at UConn and other universities. This course, however, was my first online experience. I relied primarily on online sources to learn how to teach online. I enrolled in online courses through Smart Planet (www.smartplanet.com) to learn DreamWeaver and Flash. These classes allowed me to experience being an online student and to learn technology skills in the process. I asked questions on 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). I also read the Online Teaching and Learning Newsletter (www.otnewsletter.com) and frequented Bob Jensen's website (www.trinity.edu/rjensen). At UConn, we have an internal WebCT listserv, which was always helpful. My best resources are the professors who are using technology in the classroom.

UConn 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 on-line courses

or to simply publish materials that supplement existing courses. The instructor provides the content; WebCT provides a variety of interactivity tools. I selected WebCT tools that facilitated my desired learning environment: a combination of asynchronous and synchronous activities that allowed students to complete the coursework on a self-determined schedule, subject to my constraint regarding what must be completed by a certain date. I wanted to encourage students to help each other learn, while I served as a “guide on the side.”

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 live 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.

Based on this prior research, 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. I decided to add an instant messenger software requirement to the class. I chose AOL's instant messenger (AIM) because it is a common instant messenger among UConn students.

In addition to AIM, a nonWebCT tool, I chose the following WebCT interaction tools: discussion board and email (asynchronous) and chat (synchronous). In the summer 2002 course, I began using Placeware, synchronous conferencing software. The advantage of Placeware over WebCT's chat is the ability to view spreadsheets interactively and to poll students, thus creating a more interactive environment.

Online 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 requirements as follows:

- Processor – Pentium II or equivalent running at 266Mhz or faster
- RAM 1284MB 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

In addition, I required students to download certain browser plugins to use the flash files and audio files that I created and inserted in the content pages.

Student Introduction to the Online Course

When a student logs into the WebCT UConn portal (webct.uconn.edu), the student is prompted for a user name and password. The student selects ACCT 371 from the list of WebCT courses, and the students then sees the ACCT 371 homepage, which contains links to other Web pages and the WebCT tools. The first icon, **First Class**, links to a page that provides links to the syllabus, the technology requirements page, WebCT tool review, background information survey, technology requirements survey, and introductory PowerPoint slides.

Welcome to ACCT 371: Taxation of Business Entities

[First Class](#)

[Content Modules](#)

[Assessment](#)

[Chat Room](#)



[Course Calendar](#)



[Discussion Boards](#)



[WebCT email](#)



[Student Pictures](#)

ACCT 371 Homepage

Technology Requirements. The technology requirements page lists the course technology requirements for participation in this online course. Below I list the requirements for my summer 2002 online course, and I discuss how students used the required tools.

	Requirements	Issues/Comments
1.	<p>RealPlayer Overview of ACCT 371 rtsp://137.99.107.146:554/users/adunbar/overview/trainer2.smi</p> <p>Were you able to see the Overview “movie” when you clicked on the above link? If not, download RealPlayer. It takes about 1 1/2 hrs on a 56 k modem to download this player. The player is free. You do NOT need the player with bells and whistles, which costs money. Learn more at http://www.real.com/player/. You need RealPlayer to play audio/video files that explain some of the more difficult material in the course content modules.</p>	<p>Some students had problems using RealPlayer to listen to the audio files and view the video files. Their comments on provided in Exhibit III. Creating the audio and video files is time consuming, but easy to do.</p>
2.	<p>AOL/Netscape Instant Messenger (AIM) http://www.aol.com/aim/ Download AIM, an instant messenger program. If you already have AIM upgrade to the latest version. My AIM name is amyatucon2. Please pick a name that readily identifies you. Normally, I would choose adunbar, but someone already had that name. We will use AIM constantly in this class.</p>	<p>AIM was the most crucial communications tool in the course. I created a class “buddy list,” which I gave to the students. Whenever I logged on, I could see who was online. The students quickly realized the benefit of being on AIM because they could instantly contact other students or me with questions. The survey results showed that only one student in 2001 did not use AIM. Everyone used AIM in 2002.</p>
3.	<p>Flash Player http://www.macromedia.com/shockwave/download/ Download the Flash player browser plug-in if you haven't already done so. You will need the Flash player to see the Flash files that demonstrate sequential problem solving.</p>	<p>Although I enjoy using Flash, I do not think the investment in time to learn to use Flash is worth it now that I can create videos.</p>
4.	<p>Headphones Headphones are required for the audio communication available through AIM and Placeware and to be able to listen to audio files in a public facility like our classroom, a library or computer lab.</p>	<p>My survey did not ask about headphones.</p>
5.	<p>Netscape Browser http://home.netscape.com/browsers/</p> <p>Install Netscape on your computer. I recommend that you order the CD because downloading the browser software will take hours. You</p>	<p>I ask students to use both Netscape and Internet Explorer because each browser has its strengths and weaknesses. For example, downloading files from WebCT is easier using Netscape, but viewing streaming</p>

	<p>have two choices if you order a CD: Netscape 4.79 or 6.2.1. ORDER 4.79!!! The jury is still out on version 6.</p> <p>To use all the tools in WebCT your browser must be Java-enabled. In Netscape, click Edit, click preferences, click on applications (not one of the subcategories), and then check to see if Java and Java script is enabled. If you aren't seeing something you just posted, your browser may need its cache setting changed. In Netscape, click on Edit, Preferences, Advanced, Cache, Every time.</p>	media is easier using Internet Explorer.
6.	<p>Internet Explorer http://www.microsoft.com/windows/ie/default.asp</p> <p>Install the IE browser on your computer. You can either download the browser or order the CD. Note that Microsoft has a patch that you need to install with version 6 of the browser.</p> <p>To use all the tools in WebCT your browser must be Java-enabled. In Internet Explorer, click on Tools, Internet Options, Advanced, JIT compiler for virtual machine enabled (under Microsoft VM). (If you right-click on any item in the Internet Options section, you will see an explanation of that item.) If you aren't seeing something you just posted, your browser may need its cache setting changed. In Internet Explorer, click on Tools, Internet Options, General, Settings (in the Temporary Internet Files section), Every visit to the page.</p>	See Netscape comments.
7.	<p>Memory Check</p> <p>Check your memory on the computer you will use for this class. Click on Start in your Windows menu, go to Settings, Control Panel, System. My computer uses Windows 98, and it has 384 MB RAM. Even with this much memory, I reboot at least once a day. Opening multiple programs (Netscape, Excel, Word) uses LOTS of memory. When the memory is used up, your screen freezes, and frequently your only solution is to reboot! You need at least 128 MB RAM, and you really could use 256 MB. Memory is cheap. Upgrade your memory. It's worth it!</p>	<p>Many students had computer screen freezes because they didn't have sufficient memory. During the semester, several students purchased a new computer or added memory to an existing computer. I moved to a Windows XP computer during summer 2002 with 512 MB of RAM.</p>
8.	<p>Proxy Account</p> <p>Obtain a proxy account, which is required to access UConn library resources from nonUConn locations. Go to CCH Internet Tax Research Network from your home/work computer to ensure that your proxy account works.</p>	Because the online students want to access library materials from home, they must have a proxy account.

WebCT Tool Review. In addition to a tool description, the WebCT tool review provides the actions I ask students to do in the first class to introduce them to the various WebCT tools. The WebCT tools are common to most course environment software packages; thus a description of the tools will be similar across environments.

	WebCT Tool Description and Required Actions	Purpose
1.	<p>Course Calendar</p> <p>The course calendar provides a listing of the semester's activities, with the added advantage that the entries are clickable. Check the calendar on a regular basis to find out if I have made any changes, such as a change in a due date of a quiz. The first quiz is available and is due on Tuesday, May 21, by midnight.</p> <p>ACTION: 1. Click on the first entry in the course calendar on May 20, 2002, and complete the action listed.</p>	<p>The calendar reinforces the time constraints. Seeing the due date of the first quiz on the calendar makes students aware that they must start the material promptly.</p>

<p>2.</p>	<p>Content Modules</p> <p>The content modules contain the web pages that I created. These pages have links to audio, video, Excel, and Flash files, which I also created. If you find an error, please post on the board or send me an IM. I can then correct the error before more people are confused.</p> <p>When you click on the content module icon, you will see the following content modules: Course Overview, Property Transactions, Corporate Operations, FAS 109 Tax Accrual, Corporate Formations, Corporate Distributions, AMT, Partnerships, S Corporations and Organizational Forms Overview/Review. In addition, you will see the Project module, which contains both projects, the Glossary tool, and the Compile Course Notes tool, which allows you to create a file that you can print. It is not necessary to print the content module pages. Work online. You will spend most of your working hours in front of computers. Now is as good a time as any to make the switch to reading the computer screen instead of paper.</p> <p>ACTION: 2.1. Open the Course Overview Module and read the content pages. 2.2. Access the self-test in the Action Menu at the top of the content page.</p>	<p>I created the web pages using DreamWeaver. I realized quickly the necessity of creating a map of all the web pages in this course (over 900). DreamWeaver's site management tools are easy to use.</p> <p>WebCT provides a self-test tool that allows me to create self-tests that cover the material on the page. Using this tool ensured that my content pages covered the material I wanted the students to learn. I frequently learned that I wrote a question that the page did not cover, or I included material that did not merit a question.</p>																
<p>3.</p>	<p>Your WebCT Activity</p> <p>If you click this tool, you will see your activity to date on the WebCT site.</p> <div style="border: 1px solid black; padding: 5px;"> <p>UConn Husky has visited the course site 51 times. He has read 37 content pages, and 2 discussion board "articles" (postings).</p> <p>Student Profile</p> <p>Full Name: UConn Husky User ID: uconn First login: May 20, 2001 22:19 Last login: Jul 25, 2001 18:01 Total number of accesses: 113 Last page visited: Determination of</p> <p>Show history of content pages visited</p> <p>Distribution of Visits for UConn Husky (uconn)</p> <table border="1"> <thead> <tr> <th>Page</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Homepage</td> <td>51</td> </tr> <tr> <td>Tool Pages</td> <td>14</td> </tr> <tr> <td>Content Pages</td> <td>37</td> </tr> <tr> <td>Glossary</td> <td>3</td> </tr> <tr> <td>Questions</td> <td>6</td> </tr> <tr> <td>Discussions</td> <td>Count</td> </tr> <tr> <td>Articles Read</td> <td>2</td> </tr> </tbody> </table> <p>Number of Content Pages Visited by UConn Husky (uconn) Number of different pages visited: 25 Total number of pages: 120</p> </div> <p>ACTION: 3. Click to see your activity to date. You should see your access of content pages. Note that WebCT calls discussion board postings articles.</p>	Page	Count	Homepage	51	Tool Pages	14	Content Pages	37	Glossary	3	Questions	6	Discussions	Count	Articles Read	2	<p>This tool allows students to see what pages they have visited. Students know that I have access to the same information and thus can tell who has accessed content pages.</p>
Page	Count																	
Homepage	51																	
Tool Pages	14																	
Content Pages	37																	
Glossary	3																	
Questions	6																	
Discussions	Count																	
Articles Read	2																	
<p>4.</p>	<p>Quizzes (Homework)</p> <p>The quizzes can be accessed from four places: (1) Course Menu (on left side of WebCT homepage), (2) Assessment link on the Homepage, (2) course calendar, and (3) content module listing. The first quiz is due regardless of whether you are at the first class. There are no late quizzes for any reason. I will drop the two lowest quiz scores.</p> <p>Please work with your group members on the quizzes. Do NOT post a solution to a quiz question on the group board unless someone asks a specific question about how to solve a question. For example, don't say, "What's the answer to 3?" The student can describe where s/he is having trouble, and you can help with that issue. When you are in the chat room, however, I expect you to</p>	<p>The quiz tool created an incentive for students to meet the time constraints for learning the material and to work together in the chat room.</p>																

compare answers with the other group members. I just don't want free riders to use the board posting to get answers. Remember, however, that if you just take an answer without understanding how to work the question, you will get **BURNED** on the exams.

ACTIONS:
4.1. Using any of the four ways to access the quizzes, find, work, and submit the practice quiz.
4.2. Open Quiz 1 and read the first question. Choose any answer for the first question, and save the answer. (Do not click Finish at the end of the quiz.) Close the quiz. Reopen the quiz. You will see your saved answer. You can later change your answer when you determine the correct answer.

5. Reviewing Quizzes and Exams
 Under Assessment, you see the Exam icon, which links to a list of the exams in the course.

UConn sees that the Final Exam cannot be accessed, but he can take the Midterm:	Title	Availability	Duration	Grade	Attempts
	Final Exam - Summer 2001	Unavailable	Unlimited	/100	Completed: 0 Remaining: 1
	Midterm Exam Summer 2001	From: Jun 11, 2001 12:25 To: Unlimited	Unlimited	/100	Completed: 0 Remaining: Unlimited

If an exam can be accessed unlimited times, only the first attempt's grade will be recorded. You can retake the quizzes and midterm for practice at the end of the semester when reviewing for the comprehensive final. To review your graded exam, click on **Completed** in the prior screen and then click on the linked **1** in the Number column as shown below. I provide detailed solutions to show how I determined the answer. You follow the same procedure to review graded quizzes.

UConn would click on <u>1</u> to see his graded midterm exam.	Title	Score	Max. Score	Attempts		
	Midterm Exam Summer 2001	2/2	100	Number	Score	Time
				1	2	0:52
						Graded

ACTION:
5. Review the Practice Quiz that you completed in Step 4.

The ability to see the correct answers is a wonderful feature of WebCT. After the final exam, most students reviewed their exam. Thus learning continued even after the class ended.

In the summer 2001 course, students took the exam in the classroom. In the summer 2002 course, students could take the exam from anywhere. I used the randomized question feature of WebCT's quiz function.

I do not worry about cheating because students have open access to everything. The exams, but not the quizzes, have time limits.

6. Check Your Grades
 The grade tool provides a listing of all the graded material in the class.

UConn Husky sees his summary: a zero on Quiz 1. He hasn't taken any other quizzes.	Current Student Record for UConn Husky (uconn)							
	First Name	Last Name	User ID	Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5
			Out of 10	Out of 10	Summer 2001	Summer 2001	Summer 2001	Summer 2001
			Out of 10	Out of 10	Out of 10	Out of 10	Out of 10	Out of 10
	UConn	Husky	uconn	0	---	---	---	---

You can click on a column title (e.g., Quiz 1) to see statistics (if available).

If you don't see any grades, be sure to use the scroll bar to scroll down. It may be that you aren't seeing the grade line.	
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ACTION:
6. Click on the icon to see your Practice 1 quiz grade. Note the scroll bar.

The grade tool makes the students responsible for ensuring that the grades are correct. For example, I use the quiz function for all homework and WebCT grades the quizzes. On occasion, a student enters an answer that is correct, but I have not programmed WebCT to accept that answer. When the student finds this error, s/he sends me a WebCT email, asking me to regrade that question.

7,

Discussions

A discussion board (topic) can be searched for content, sender, date of sending, and more. Articles can have embedded URLs, which are made clickable by WebCT. Content pages automatically have a dedicated Notes board so that questions about that page are easily found later for reference. When a message is posted directly from a content page, the reader can click a link to present that page in a separate window.

When you click on the discussion links, you will see only the boards that you can access. In addition to seeing All, Humor, Main, Notes, and Personal Postings, you will see one of the following groups: Group 1A, Group 2A, Group 3A, Group 4A, Group 5A, Group 6A, Group 1B, Group 2B, Group 3B, Group 4B, Group 5B, Group 6B. This group is your discussion/projects group. You CANNOT change your group. You are in this group for the duration of the class.

UConn Husky, a student in this class, is a member of Group 2 and Group 2_2. UConn sees that there are 313 unread messages on all of the boards, of which 22 have been posted by Group 2 members and 8 by Group 2_2 members.

Home - Discussions

Select a topic to see its messages

Compose Message
Search

Topic	Unread	Total	Status
All	313	315	
Group 2	22	22	private, unlocked
Group 2_2	8	8	private, unlocked
Humor	11	11	public, unlocked
Main	238	240	public, unlocked
Notes	14	14	public, unlocked
Personal postings: not class material	19	19	public, unlocked

ACTIONS:

7.1. Post a message on the Student Information board to introduce yourself. Assume that no one knows a thing about you except your name. Tell us your AIM screen name, your undergrad school, your major (not all of you are accounting majors), what you used to do for fun (before you started summer school). ;-)

7.2. Post a message on your group board. Tell your group what your study schedule will be. You will get to know these people VERY well.

7.3. Create a group buddy list in AIM for your group members.

This instruction varies, depending on how many students are enrolled. In summer 2001, I created eight-member groups. The project groups had four members each. Students did not like this arrangement, so in summer 2002, I created six-member groups, which were the same for discussion and projects. The main criticism now is that I select the group members instead of allowing the class to self-select into groups. Because students are coming from other schools, I am concerned that all the UConn students will self-select in UConn groups, leaving out students from the other schools. I am considering setting up groups based on physical location in the state for summer 2003.

8.

WebCT email

WebCT email can only be accessed within WebCT. You cannot send to someone outside of WebCT. Please use only WebCT email, not your outside email (e.g., AOL or hotmail) to communicate with me.

When UConn Husky clicks on the icon, he sees that he has one new message in his Inbox. He can click on Inbox to see his message.

Select a folder to see your mail

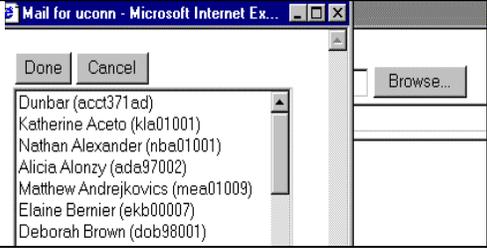
You have 1 new message in Inbox

Compose Mail Message

Search | Manage Folders | Manage Messages

Folder	Unread	Total
All	1	1
Draft	0	0
Inbox	1	1
Outbox	0	0

I ask students to use WebCT email only to keep all my class email in one location.

	<p>To send a new email, click on Compose Mail Message. Then click on Browse to find the list of WebCT email addresses. Click on the person you want and click Done. Hold down the Shift and Ctrl keys to select multiple addressees.</p>		
	<p>ACTION: 8.1. Send a WebCT email to your group members and me. Include all the addressees in a single email. List your group members and their AIM names in the email to confirm to me that you know who your group members are and how to recognize them on AIM. 8.2. Repeat Action 7 (Review the Practice Quiz that you completed in Step 3). Copy my comments, paste them in a WebCT email, and send them to me.</p>		
<p>9.</p>	<p>Chat Room If you click on the Chat Room icon, you will see six chatrooms.</p> <p>ACTIONS: 9. Go into Chat Room 1, 2, or 3 based on your group number. If you are in Group 1A, Group 4A, Group 1B, or Group 4B, log into chatroom 1. If you are in Group 2A, Group 5A, Group 2B, or Group 5B, log into chatroom 2. If you are in Group 3A, Group 6A, Group 3B, or Group 6B, log into chatroom 3. Once all your group members are in your chat room, send me an IM asking me to come to your chatroom.</p>		<p>This instruction asks students to practice an action they will perform many times during the semester.</p>

Class Conduct

ACCT 371 covers the tax rules that govern the formation, operation, distribution, and liquidation of business 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 homework, projects, and exams. My schedule of topics is as follows: Property Transactions, C Corporations (regular corporations), and Partnerships. My projects involve the preparation of spreadsheets reconciling book income to taxable income and the tax returns.

Because the life cycle of a business incorporates many of the concepts learned in the property transactions module of the undergraduate introductory tax course, I begin the course with a property transactions review. This review enables graduate students who come from schools other than UConn to have the same baseline knowledge.

Content Modules. Most students learned to read the content pages online, but some continued to print the modules. Because many pages are linked to other pages, Excel files, Flash files, or audio/video files, printing the pages does not work well. Although students requested that I create a more print-friendly version, I want the students to work online. Some students did not buy the required book because they said the contents modules were sufficient.

Students quickly realized the benefits of working the self-tests in the content modules because many quiz questions were patterned after self-test questions. Students sent IMs when they had a question while they were working through the content modules. I learned to answer a question with a question, rather than simply giving the answer. For example, I would ask them to give me a journal entry to record the transaction in question. Thus, the student knew that s/he would have to work with me. I avoided passive learning whenever possible. I used the emoticons in my IMs to

convey humor. 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 😊.

Quizzes (Homework)/Chat Rooms. 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, they 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. Each group member would list the answer. If there were conflicting answers, each student explained his/her answer. If they could not resolve it on their own, they sent me an IM 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 1 is from a typical chat session. I also noticed that as the semester progressed, the students used a lot of typing shortcuts and acronyms, such as “ttyl” for talk to you later or “lol” for laughing out loud.

One of my favorite chat experiences was around 10 PM on a Friday night, and two students from different groups were in a chatroom working on a quiz. They sent me an IM asking me to help them with a question. One student was a white male and the other was an Asian female who were working together because they happened to see each other online and decided to work in a chatroom together. Thus, the combination of AIM and WebCT put students together who might not otherwise have found each other.

Projects. I asked the students to come to class when it was time to work on the forms. The students met in their groups in various locations within the building, and I circulated among the groups, answering questions. The students like meeting live, and they liked the projects, as evidenced by the end-of-semester survey. I graded the forms before the group left the class. The grading task was easy because I made sure they were doing the forms right as they worked on them.

Online Time. In the 2001 class, I initially required the students to be in a chat room during the regularly scheduled class times. As the semester went on, students objected to this practice. They wanted more flexibility in scheduling the times they worked with their groups. I did not require attendance in a chat room in 2002. However, I did schedule two synchronous classes in conjunction with the projects.

I changed the scheduling of quiz due dates from Wednesday and Sunday to Tuesday and Thursday. The first class was on Monday and the first quiz was due on Tuesday. Accelerating the due dates helped keep the class on schedule. In summer 2002, I was online 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, generally I would go online for an hour or so in the morning, so my early students could talk to me. I then would go back online around 1 PM and I would stay online until around 9 PM. , with a two-hour break around 5 PM.

When I was away from my computer, I created a message indicating when I would be back, which students would receive when they tried to contact me. A student can tell by looking at the online buddy list who is actively online and who is online, but away from the computer. Some instructors may not want to be online to this extent, but I generally am online while I am working at my computer, so being accessible on Monday-Friday did not present a problem for me.

Student Reaction to the Online Environment

At the end of the semester, I surveyed the class about the learning environment (see survey results in Exhibit II). The tools I selected were chosen to facilitate discovery-based learning. I wanted to determine if the students used the tools and whether they wanted more/less of the tools. Overall, the students were satisfied with the learning methods. 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% of the students viewing the videos, whereas only 72% 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%), and I complied, adding questions to my self-tests. Despite the increase, the 2002 students still want more self-tests (77%). The request for more Excel problems increased from 35% to 57%, and for audio files increased from 25% to 37%. The demand for more Flash files remained the same across the two years (22%, 21%).

Creating the RealPresenter videos was time consuming for me because I had to convert my content modules to PowerPoint and then record audio as the slides played. Before I invested more time, I wanted to be sure they were useful to students; 42% wanted more videos. Student responses to my questions asking if watching the videos was worth their time are in Exhibit III. 34% 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.

Holding synchronous classes is far more exhausting than I anticipated, despite the fact that the Placeware software is easy to use. Headphones are essential if you are going to be online talking for an hour at a time. My classes were too long, lasting almost two hours. I will hold one—hour classes in the future. The class used audio conferencing in conjunction with Placeware for the voice. 18% 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; 7% found the synchronous classes ineffective with audio only. 71% had both audio and video, of which 60% were satisfied with the classes. Question 6 asked how often I should hold synchronous classes. 54% wanted just the two classes that I held; 28% wanted one-hour synchronous classes every week. Student responses to whether the classes were worth their time are in Exhibit IV. 65% of the comments were positive. I expect the satisfaction percentage to increase as I improve my ability to conduct synchronous classes.

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% in 2001 to 81% in 2002. The speed of the Internet connection remained a problem, although it decreased from 40% in 2001 to 19% in 2002.

Some of my students used AIM sporadically to contact me, but only one student didn't use it at all over the two years. Most students were satisfied with their interaction with me, although satisfaction decreased from 78% to 68%. On the university-level survey, however, students rated me over 9 on a 10 point scale.

What surprised me the most was how much the students loved their 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. I think 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.

56% of the students in both 2001 and 2002 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 six weeks away from being undergraduates. The students found discovery-based learning challenging, as evidenced by their comments in Exhibit VI. Part of their responses can be attributed to being thrust into the graduate environment with its attendant heavier workload. I think they expected their old learning patterns to continue to work for them. In the fall 2001, 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.

Student Reaction to the Instructor

UConn created an online evaluation to replace 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 V. 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, so I cannot explain the lower ratings. In general, students appear to be happy with my instruction.

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.

At the end of the six-week course, I was tired, but I was equally tired at the end of the live six-week course in summer 2000. I do not think the online environment made my life easier, but it made it more fun. The students appreciated the flexibility, and they liked not having to drive to Hartford for 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.

References

Gagne, Margaret and Morgan Shepherd, A Comparison Between a Distance and a Traditional Graduate Accounting Class. *T.H.E. Journal*, April 2001. 58-64

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EXHIBIT I

Example 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, I have changed the names.

```
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
DM>>me too
```

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 (e.g., in tax accrual content module, the flash file showed the steps of the accrual)	11%	45%	44%	2%	58%	40%
Listening to sound files (Dunbar talked about the material)	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 Dunbar 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 Dunbar 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 (e.g., in tax accrual content module, the flash file showed the steps of the accrual).	11%	20%	47%	22%	2%	18%	60%	21%
Audio files (Dunbar talked about the material)	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. I'm trying to decide if the RealPresenter videos (the PowerPoint presentations with audio) are worth the effort to create. 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. This problem is generally associated with insufficient memory. Dunbar has 256K of RAM, and she still reboots several times a day. The problem is that some programs don't release memory when you close them, thus requiring you to reboot to restore the memory. Check how much memory you have by clicking Settings, Control Panel, and System. If you have less than 128 RAM, you need more memory!	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 (West Hartford or Storrs), 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
Dunbar 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 Dunbar by AIM	0%	0%
I figured I could learn the material on my own without Dunbar's help.	7%	14%
The interaction with my group members was sufficient.	40%	32%
I just didn't have time to interact with Dunbar	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 Dunbar.	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

A. Helpful

1. I thought the videos were extremely helpful, especially when accompanied by powepoint slides.
2. I think the videos were GREAT! They helped me to understand the content. I liked the videos because they are more like a classroom setting, rather than teach yourself learning. I don't think videos are necessary for all of the content modules, just the ones that are more difficult to understand.
3. 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.
4. It is very helpful.
5. It was very helpful to have the videos because I need to have someone verbally explain things to me so the videos were very helpful...:-)
6. 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
7. I felt they were worth the time. Complemented the content modules. I wouldn't like to have more videos. It would take too much time to go through them and the modules.
8. Wouldn't like them for all modules, but the ones you had were very helpful.
9. 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 Dunbar 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.
10. I found the videos to be very helpful. Sometimes is gets rather tedious reading through the material, and I often found myself not remembering what I just read. The videos were a very effective way of reinforcing the material we were learning.
11. I think the videos helped pull concepts together visually. Very helpful to see things visually, rather than on paper. I think they are a great tool for students.
12. 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.
13. I only watched a few of the videos when I didn't understand the subject matter very clearly. They were worth my time.
14. I watched some of the videos and I think they are really helpful and are worth the time. For the videos that I never got to watch the reason was exclusively due to lack/limit of time on my part.
15. 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 did watch the videos. They were worth my time. I would have liked to have videos for all the content modules. I wouldn't change them.
2. I really liked the videos. They helped me more than anything. If there were more, that would be great. But I understand that it probably takes a lot of work to make one
3. 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.
4. I thought that the videos were helpful because it was someone else's voice rather than just reading stuff to myself. More of them would be helpful!
5. I didn't watch the videos in the beginning because my computer wasn't letting me. However, once I watched them I wished I had more of them. It was easier to concentrate and pay attention rather than getting the wrong idea in my head and not understanding something. Add more, lots more.
6. I would like to have videos for all content modules.
7. The more sound supported videos the better.
8. I truly liked the videos. I wish there had been more. It complimented the material by way of an oral explanation and for review. They were handy because I could pause and play at my own speed. There was one video that was difficult to follow because it was presented in a different order than the content module. Therefore, I would recommend the order of the video information be similar to the content modules.
9. 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.
10. I watched the videos. I think they were worth my time. I would like to have videos for all the content modules. I wouldn't change them. They were perfect and they helped me a lot to understand the material. It's sometimes easier to listen to someone explain this stuff than learn it on your own.
11. I watched the videos and found them more helpful than the content modules. I think you should do them for all of the content modules.
12. 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.
13. They were definitely worth my time. I think videos for more of the content modules would be beneficial. I don't know how I would change them...they are good!

14. The videos were definitely worth my time. I would have used videos for all the content modules. Sometimes after staring at content modules all day, you need to hear someone explain it in real words, live. It makes you realize you really do have a teacher teaching, and makes it less of a teach it to yourself. Especially with this material, sometimes you need to hear a human voice. As far as change, it would be nice to have the powerpoint slides also available as a file. Sometimes I would remember something from the video and wished I could quickly point to that slide for an explanation rather than going through and finding the slide within the video. (Since I like printing things out, I would be able to quickly find that slide during an exam rather than finding the correct link).
15. 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. I did watch them and thought they were helpful but maybe you could provide a link to print them out because I am a hands on learner and need to write stuff down to retain it.
2. It would have been helpful if the videos went through the notes in the same order. Sometimes it was hard to match the video to the notes, and I ended up writing the material down which was time consuming.
3. 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. Yes, I watched the videos and thought they were helpful. Sometimes, they were a bit too long.
2. I could view the powerpoint slides but not hear the audio, so it was somewhat helpful but not as effective as I'm sure it could have been.
3. 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.
4. I watched some if I was having problems. They just took too long to download and kept buffering all the time. It was really a pain. If I had been at school I probably would have watched them all.

E. Negative

1. I didn't think that the videos really helped that much.
2. I watched the videos, but they were too choppy. I did not like them, I learned much more through the content modules.
3. 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.
4. I don't feel the videos were worth your time. It was more of a hassle then a help.
5. Working an average of 30 hours a week, I found that I had time for only what I thought was really essential to the course
6. I find it difficult to learn that way. I find it easier to read the content modules and to follow the sample problems.
7. I didn't watch the videos because I have too much work to do already!!! I believe the videos contain all the material in the content modules (or even maybe a little less) so I felt that watching the videos would just be doubling up my workload and maybe even missing some of the material in the modules.
8. I just didn't bother
9. I didn't watch the videos because I couldn't get my real player to work and I didn't find them necessary.
10. I was unable to watch the videos because while I was playing it, it kept shutting down and re-booting!!
11. I was unable to connect to the RealPresenter videos so I was not able to benefit from them. But I could only imagine them being helpful
12. 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.
13. Honestly, I couldn't open them on my computer. I had access to another computer that would play them at my Dad's office, but I never felt like they were a necessity.
14. I didn't watch the videos because I didn't have computer capabilities to do so.
15. I didn't watch the videos because I couldn't get the picture to view on my computer.
16. I tried to watch the videos. But if you're working off a modem, the connection is really slow and it pauses every 30 seconds. And that was with a top of the line pc. Also, I felt they were completely not worth the time it takes to watch them. This may be because I learn visually, but not through listening.
17. I didn't watch most of the videos due to time constraints and downloading issues (modem). I would listen to the presentations that took a short time to download and play.
18. I didn't watch them, because I felt that my time was better spend redoing quizzes, talking over stuff with other students and Dunbar, and studying the content modules. The selftests really helped a lot too, because I could see what I was doing wrong.
19. I didn't watch the videos that were more than a few minutes. I felt that I didn't have the time to spare.

EXHIBIT IV

Student Synchronous Class Comments – Summer 2002

A. Positive

1. I liked the synchronous classes. I felt they helped to tie everything together
2. Yes, they were worth the time because they helped with the project.
3. I attended one and it was helpful. The second I was out of town and could not attend.
4. I think the classes were helpful in understanding some of the basic ideas.
5. I did attend the synchronous classes, which enabled me to have a better approach when starting the projects.
6. 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.
7. Yes they got me off on the right track for each project.
8. I loved the synchronous classes. They helped to put a visual perspective to this online class
9. 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.
10. The synchronous classes are the BEST!!!!They cleared so many problems for me and pointed me in the right direction. It's wonderful, and I love it!!!!
11. I thought the classes were great. I think if I had video it would have been even better, but just audio was plenty effective. I felt they were one of the best parts of the course.
12. 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.
13. The synchronous class definitely helped out a lot when working on the first project. It was WELL WORTH the time. I wish I had been able to attend the second one, but I didn't find out about it until too late.
14. They were worth my time especially to learn how to work the projects but if you held either a synchronous class or a live class once a week I think it would really help.
15. They were definitely worth my time...helped a lot.
16. I attended one, listened to one recorded audio file and for the third one I had planned to listen to the recorded audio file, had it been available [third one was a voluntary review session]. I think the classes are a very helpful tool not only for the projects but probably for explaining some the difficult modules too.
17. I attended them both, and they were definitely worth the time. I still learn much more effectively when in a class setting, whether it be synchronous online or in person. Provided everyone has available resources, I'd suggest increasing the number of the synchronous meetings.
18. 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.
19. I thought the classes were worth the time, but I did not have video for the second class. I would suggest they are more beneficial when you can use both.
20. I didn't attend, but I listened to the tapes [of the synchronous classes] and they were very helpful.
21. 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.
22. Okay maybe not just for the projects, maybe for important topic stuff too that no one understands, but that wasn't a choice. They were worth my time, but my mind tends to wander if I'm just looking at spreadsheets, and not doing anything with them. The first one was more useful.
23. Yes, they were worth my time. The only thing is that to truly benefit you must have audio and video. Having class once a week for an hour or more would tie up all the phone lines in my house and that is not good. I thought that the two meetings were sufficient.
24. I thought they helped although having them too often would be too much of a time strain.
25. I thought the synchronous classes were worth my time, especially the first one. It really helped me get a handle on the workpapers.

B. Positive with criticism

1. They were somewhat helpful, although material was covered fast and it was sometimes hard to keep up
2. Yes...although sometimes it seemed fast paced and I ended up just absorbing the info instead of trying to follow exactly every detail. (more so when I only used audio instead of audio and video.)
3. 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.
5. Yes, I did attend both synchronous classes. I thought the first class was very helpful, but the second class was pretty much a repeat of your RealPresenter videos (except for the project info.) The classes helped me to understand the project in a lot less time than it would have taken me to figure them out on my own.
6. 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.
7. I found the first class extremely helpful but I didn't take as much away from the second
8. I did attend. The classes were worthwhile and helped me to understand the material much better. However, at times I just couldn't keep up so I feel stretching the classes out over a longer period and having them more frequently will help a lot.

9. 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.
10. They were worth it but they were a little long.
11. They helped explain parts of the project but tended to go a bit too long.
12. 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. Yes, I did attend the class, but I don't think it was worth my time.
2. I attended. They would have been worth the time if I hadn't kept losing my place.
3. They were not very helpful. It made me more confused. I learned a lot more working with my group members and through AIM.
4. I was very confused in the synchronous classes. They did help somewhat with the projects, but I think that maybe if they were held more often for a shorter period of time, it would be easier to follow along. Simply because it is a lot of information in a short period of time, and I don't learn as quickly as a lot of other people when I'm listening on the phone.
5. For the most part, I found the classes to be confusing. I was only using audio which put me at a slight disadvantage. If the slides were available before the class started, I would have found them more helpful.
6. They got me very confused
7. Not really, they could be a lot shorter.
8. Not really because I didn't have a cable modem. By only having access to audio, it was easy to get confused and not understand what was going on. For the first project it was more effective. For the second project, it helped very little.

D. Did not attend because student had no time

1. I was working, so I was unable to attend. I was going to listen to them later, but honestly 1 hour of listening to conversation that may or may not help is not worth it. I'd rather study. There are not enough hours in the day to participate in the synchronous class.
2. I didn't have time.
3. Busy
4. Conflicting schedule at times
5. I spoke with class members that were able to attend.
6. I couldn't attend at the scheduled times. But I could get access to them later.
7. I don't have both video and audio, so I didn't think it would be worth it, not being able to either hear, or see.

E. No feedback responses

1. I attended.
3. Yes
4. Yes
5. Yes

EXHIBIT V
Student Group Comments – Summer 2001
(55 of 57 students in two classes)

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. Our group was fantastic. I would never have gotten through the projects without their help. Every group member was prepared and had done a significant amount of work before each project meeting. Although it was difficult to meet up on line, I could not have been more pleased with the people that I had the privilege of working with this summer.
2. My group was very helpful to me, online and in class. We did not always meet at the same time but I could usually work with at least 1 or 2 of them online. We worked well together on the project
3. We all got along very well, and were always willing to help each other. We also each were always prepared and contributed.
4. Our group was filled with people that were both intelligent and fun to work with. We all learned a great deal about tax and what it takes to be a good team player. Phew! It was a lot of work, but worth it looking back on those busy six weeks. Thanks everyone.
5. This group was a good group. We individually did most of the work but then got together at the end to review our work. Everyone was very helpful when it came time to go over quizzes and working on the project was very good. We all helped each other out.
6. 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. Dunbar, 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.
7. Everything was fine with our group. I feel that the group projects were very beneficial to the formation of a strong group.
8. My group was AWESOME. We worked well together, our schedules were compatible (which made it much easier to set up times to meet to go over information/quizzes/projects), and everyone did their part to help everyone else. We were usually one of the first groups to meet for a quiz, so that we had time afterwards to go over it again and make sure we didn't miss anything the first or second time through. If we had questions, there would always be one of us who could help.
9. 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.
10. My group is very good. I learned a lot from my group.
11. Well, I enjoyed working with my group. It seemed evident that our work styles complemented each other very well. Everyone was very understanding and accommodating when arranging times to meet for quizzes, etc. My group in a nutshell was GREAT!! I couldn't have asked for you to have chosen a better bunch!
12. 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.
13. We worked well together
14. The group worked well the second half. We all wanted to do well and we found that we did better with cooperation. You could stress how important it is in the class and in real world applications.
15. I really liked my group. They were fun to work with and very helpful on the quizzes. It was a good group.
16. Our group worked really well together in groups and was always willing to help explain a concept to another group member.
17. I think that my group was very reliable and contributed a lot to my learning in this class. I think that the group participation was a great feature to this class.
18. 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.
19. My group was very good. We worked well together and made sure that everyone in our group understood the material we were trying to learn. I couldn't have asked for a better group.
20. I like my group 6 not just 6-2. (I worked with afternoon class as well.) I think group 6 is a very good group. We always tried to work together. And we always tried to be flexible as we can. All of them are very helpful. I really enjoyed my time.
21. 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.
22. It was a good group. We managed to make time for each other and get together to help after completing the quizzes.
23. My group was great. We all worked together to come up with answers.
24. 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.
25. As a group we worked well together. Whenever I had a question I knew that I could IM someone and they would usually go out of their way to help. I know that I have, because that is one of the better ways to reinforce the material. You have gone way out of your way already to help with the learning process. I don't think that you could physically do anymore!

26. Our group was a great group. We all worked really well together and helped each other out immensely. I couldn't have chosen a better group of people to work with!!
27. 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.
28. My group was excellent. We had the other class together so we saw each other often and everyone pulled their weight, not relying on the others all of the time and helping clarify concepts to the rest of us. The group learning process depends upon the group member. There is nothing you can do to make it better, only the students can do that.
29. I would say it was a pretty good group. We met online a lot and spend a good deal of time discussing and would always make sure everyone knew what they were doing before moving on. I can't think of anything to help the process.
30. 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.
31. My group was an outstanding group. We were very well coordinated and everybody took part in the learning process. I think you have done very well and I have no further suggestions other than to keep up the good work.
32. It was small, and all of us communicated very well with each other. We were always on top of our assignments.
33. Great group...worked well together...no complaints
34. I thought all my group members were intelligent and helpful. I thought it was a good group because there was almost always someone available to work with.
35. I was already friendly with Steve and I became friendly with Haoyu and Allison. I felt like we had a great group.
36. We worked well together when we met in class for the projects. We also made strong efforts in chat rooms during the quizzes.
37. Group 4-1 was very good at teamwork. We helped each other out a lot in completing the quizzes and projects. Everyone was friendly and fun to work with. I liked working in a small group better (just 4-1) than a large group (all of group 4). We were able to give each other more attention that way.
38. It was an excellent group. We scheduled meetings well. We discussed the material and projects. We interacted well, good communication. With the time limitation, group interaction is not as extensive as a regular semester class but it was nonetheless excellent. I don't see any way that you could improve the group learning process (it depends on what individual wants out of the class). One concern that never appeared was if I got a bad or busy team member. Group interaction could be difficult and I won't get as much out of the class.
39. 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)
40. Everyone tried very hard to meet at the same time all of the time. It was very rare (in the second half) for our group to be meeting and have someone missing. All group members were prepared every time we met. We communicated constantly; what might seem like a pointless posting might not seem pointless to someone else. Definitely force people to communicate, I definitely would not have been as active if you hadn't made us do postings and so forth in the beginning.
41. My group was really great. Everyone would try to find a time when we could all go over the quizzes together. If someone couldn't make it, they would e-mail them the answers to check with the ones they got so they weren't left behind. Every time I would instant message someone with a question, they would be quick to get back and really helpful. It worked out really well.
42. 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.
43. Everyone worked well together. Each member put in a lot of time for each project. The quizzes were completed individually so we could each find our weaknesses and then as we went over the quizzes, the answers were explained until everyone felt comfortable. Personally I think that the time we spent face to face as a team was more valuable than the time we spent online
44. I think our group is an excellent group. My group worked very closely. We went over every quiz together in the chatroom 3, although total 6 of us not always work together to go over the quiz this is due to different time schedules. But we at least went over the quiz with two members or more. I really believe group work is one of great learning process. It is a great way to contribute and learn from each other and a great learning experience too. I enjoyed so much with my group members. Even though I am only with them only 3 weeks, but I felt like I've been worked with them right from the beginning of class. From this group work experience, I don't think any suggestion is needed because they are just wonderful!

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.
2. It is a good group. Also, small groups are better than large ones.

C. Positive with complaint

1. My group worked really well together. When one person didn't understand something, someone was able to explain it in a way that made us all understand better. We also worked well to establish times to meet in the chat room to go over the quizzes and the projects. The only thing that I found frustrating was that for the first project not everyone knew how to link cells together in Excel. It is very hard to try and tell someone how that works through a chat room.
2. I liked my group. It was just hard to learn over the internet because using IM or a chat room takes a lot more time than interacting face to face.
3. 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.
4. It was a good group except that it is hard to get to know everyone because we have different schedules.

5. My group was very helpful when it came to explaining things and made sure that everyone understood what was going on. The only problem was all being able to meet at the same time, but we were able to make compromises.
6. 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.
7. Dunbar, I participated in the discussion groups, but I did the projects solo. I thought the group communication was good; it helped me when my computer wasn't crashing
8. Overall I had a very good group. The most valuable thing for me was going over the quizzes. That is where I realized the mistakes I was making and my group usually did a good job helping me understand things I had wrong. Some members did not always make it a high priority to be in the chat room, but I know that at least one member was working with people not in group 1. However, that was not much help to group 1.

D. Suggestion only

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

Student Group Comments – Summer 2002

(57 of 58 students in two classes)

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. I had a great group. Everyone contributed and was willing to drive to meet in person to do the projects.
2. I had a great group.
3. The group was great. Everyone was an equal contributor.
4. My group worked so well together. We all previously knew each other and kept in touch daily with each other. We mixed fun and work when we got together and the projects seemed easier.
5. Having the groups is very helpful. Since we don't have a teacher there all the time to teach us, we were able to teach each other rather than just teaching ourselves. I don't think I would make it without my group! Not that I was dependent on them, but I think that all of our brains together were much more effective!
6. 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.
7. I think I had a very good group- probably one of the best groups that I've ever had throughout my college career. We all worked really well together. We were always ready to make the time to meet for our quizzes and the projects.
8. I liked my group b/c we helped each other out. they were really patient with me. It took me a while to understand and they understood and were willing to take the time to explain things to me
9. My group was great; everyone gave 100%.
10. Our group was fantastic. I didn't know any of them coming into the class, but interacting with them so much really enabled me to know them and feel comfortable asking them questions about the material. We met online in a chat room every day a quiz was due to go over the answers. When it came time to do the projects, we were able to meet in person. I think that was a better solution than meeting online. Face-to-face for projects works well. From my viewpoint we were a group of hard workers, and I didn't see slacking. Everyone did their part. If at anytime someone needed help, group members were able to go step-by-step through calculations and we didn't move on until we felt they had a good grasp of the information
11. I like the group members I worked with. They were always willing to help me understand my mistakes. I think group learning is successful depending on the group members and whether or not they want to help others. The process in general is a good idea because it gives other students the opportunity to ask other students who might be having the same problems.
12. 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.
13. I'm not big on groups in the classroom so this group was decent because no one was really stressed about trying to meet online.
14. I thought my group worked really well together. We were able to coordinate times and work on quizzes and projects
15. 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.
16. My group was pretty good. Most of the time we were not on AIM at the same time, except for Kim and I. No one complained in our group, and everyone was willing to accommodate the other group member's schedule. We tried to the best of our ability to make the scheduled meeting, and if something came up, we posted our answers and solutions for the other group members to have our feedback on the quiz. We also joked around with each other which made it fun when we were struggling with a quiz problem.
17. My group met every week twice a week for the quizzes and I found them very helpful. They were a good group to work with because everyone tried equally hard. It helped a lot when you came into our chat room and helped us on quiz problems.
18. I thought we had a very good group, we did the quizzes together and people were very helpful with explaining things if someone didn't understand
19. My group was great!! Everyone did all the work by themselves and then we all came together to go over it. This is why I think we all learned everything.
20. I thought that my group was very helpful. We had a set time to meet each Tuesday and Thursday that we established at the first class meeting. This way there was minimal conflicts with time issues.

21. It was a nice group. Every member contributes his best to group work.
22. My group was good. I got along great with everyone and we seemed to have a good rapport online. It is helpful that you were online often so we could use your assistance if needed.
23. The group was really great. I liked how I could count on people to ask them questions. I also liked we could go over the quizzes together to really learn from each other. Meeting to go over the project was helpful too.
24. My group was good because we met on a regular bases and were always willing to help each other.
25. I think that my group worked well, and was able to help each other because different members are at different levels, of learning and knowledge. And they can feed off each other. I think groups is the best approach.
26. I had a great group. Everyone was willing to help me and I don't think I would have gotten through this class without them because I enjoy the immediate feedback, especially when you are not online.
27. I liked my group. I think it was really helpful to bounce ideas off of each other.
28. My group was awesome. I really enjoyed the group aspect of this class because all of my group members helped me in one way or another. We didn't have any slackers as I was concerned about in the beginning. I learnt the most from them in the chat room when we went over the quizzes...now if only we could do the midterm and final together. All that brainpower is sure to make us winners. Seriously we worked well together. Just with the projects, it's really hard to work on them without actually meeting. This is an on-line class after all so this might be a problem for some people. Luckily our group members were willing to meet. I say this group stuff is a must in this class. It really helped me learn so much more.
29. I loved my group. Even though, we had completely incompatible schedules, we had lots of communication through the bulletin board (so don't knock it Dunbar that we didn't use the chat room as much as you would have liked).
30. 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.
31. I had a great group. We set up chatrooms on AIM (*AIM in itself helped a LOT to facilitate that*) weekly and had our own synchronous class of sorts to go through all of the quizzes. Everyone in the group put a lot of effort into the class, and no one slacked ;-), which was refreshing. I've had some good and not-so-good group work experiences, but this was definitely one of the better ones.

B. Positive with suggestion

1. I think I was very lucky and had a great group. Everyone worked very, very hard and we all had the same goals. Each member was very polite, hard working, and flexible with each other's schedules-which is very important. Also, everyone was willing to take it slow and explain things. Nobody seemed agitated or impatient. One thought...it might be nice if the groups could somehow have access to the telephone conferencing tool. For instance, we could set up times with you and we could have a meeting number for the 1-800 number. The chatrooms are great, but if we were talking and using the chatroom, the quiz process would have been faster. I don't know if that is possible, but just a suggestion.
2. I like my group, because I thought we were all fair when it comes time for evaluations. But I know that is not the case with every group. We've already spoken about this, but I would say that 75% of the people who give bad evals are really the ones who are the problem. Because most people who do a lot of work wouldn't give bad evals to other people out of good character (there is probably a correlation between doing your hw on time and having good moral character). The people who do not do much work are scared of getting bad evals, and give their group members bad evals, so that the professor can't distinguish who was really the problem. Think about this... it really makes sense. College students are just too immature to be trusted with the responsibility of fairly grading another person.
3. 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.
4. My group was great. We did a lot of things on our own but when we needed help, someone was almost always there to help out. We didn't use the chat room but that way it was almost easier to learn because no one was carrying the other person in the chat. Also we met for both projects and that worked out great. Only way to really help is try to put people who live close together in the same group, might make meeting more convenient.
5. My group is fine. I see that you team up people with different level of tax knowledge/skills, which is nice. Because those people with better understanding in tax can definitely help those who are weaker in that area. However, one suggestion about forming group: Location. My group all lived near Storrs area. They can meet in person to do the project. I really would like to meet with them also, but since I live in Stamford, it's impossible for me to drive 4 hours in one day to do the group project together. Maybe you can ask the location of the students in your "beginning class survey" and team up people who live close to each other?
6. 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.
7. My group was quite effective for the most part. We all worked on the quizzes as much as we could before the scheduled group meetings and then we would go over the answers and discuss any differences that we had in our answers. We set up a meeting schedule during the first week of class, taking into consideration everyone's personal study schedule. We also exchanged each other's phone numbers, so whenever someone failed to show up for a group meeting we were able to get in touch with them. One of the challenges that we ran into was occasional schedule conflicts, which was successfully resolved most of the time.
8. I think we had a good group because everyone was always willing to meet. Some of us got lazy towards the last two quizzes, but we still met. You should suggest that groups meet for all quizzes, because I know of groups that did not meet at all.
9. 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.

10. Our group was good because we all got along very well. The only problem was coordinating our schedules. Maybe next time you could poll people who work and when so you could match people with coordinating schedules.

C. Positive with complaint

1. It's hard to match up everyone schedules but they do help. Everyone just has to be understanding,
2. I liked my groups. We all communicated very well with each other. It's hard to be an online class and have a group so there is not much more that can be done to help the learning process
3. I think we had a good group, but it was very time consuming to go over the quizzes on-line.
4. I thought that our group was great as far as the quizzes went, but the projects would have been better and more understood if we were able to meet and do them together. I saw how that was helpful in other groups, but we didn't have enough time to meet between work schedules.
5. Group work can be helpful and effective but it also can be very time consuming. It's difficult working in an online group because you never know who actually put in the effort to prepare themselves for the group discussions. But that is not a problem that can be easily solved. But overall the groups did allow me to learn more than I would have on my own.
6. 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.
7. Most people in my group weren't available very often, either due to jobs or whatnot. I was on the internet about 8-10 hours a day, so I know it wasn't me being unavailable.
8. My group was just okay. I had friends who I knew and they really became my group. The only idea I have is to choose your own groups.
9. 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.
10. I think my group worked really well together. We were able to meet a lot and help everyone out. The only bad thing was coinciding schedules, which was especially hard since some people were working and others were not. It is also difficult because the group generally has to go at the pace of the slowest learner, but in some cases that helped everyone really understand what was going on.

D. Suggestion only

1. I wish you could pick groups; I ended up working with my friends who lived in my town more than my actual group.
2. Insist that groups interact online more frequently
3. 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 am not the biggest fan of group work. I found it hard and very very long to go over the quizzes with group members online. I also think some students have the tendency not to do the work and allow other group members to carry them.
2. My group was a not so good group. We didn't interact a lot. We did much better without posting and working together in the chatroom. Then everyone had to contribute, but then again, one member was never there with us. This is not the group I would have chosen on my own, but the one positive is that I got to know one group member (who I'd never met before) really well, so now I at least know one 1 person I'm going to work with. :)
3. 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. This experience was very new to me and I learned a lot, but my expectations were different because I didn't know this was going to be an on-line class. I don't think I could have gotten through this class without the help and support of you and my group members. Above I checked that I would prefer a live classroom setting. Tax can be confusing and I think I would understand the material better if you were telling it to me rather than me reading it on the computer. I learn better by hearing things than by reading them. Even though this class did not completely support my style of learning, I still think it is one of the best classes I have taken, mostly because of the way it is structured - group work. (And also because it has a great teacher.)
2. My experience with the online class was overall excellent. A lot of things can go wrong with the internet, and overall those minor problems that we experienced did not interfere with my learning. I would suggest using this class format again because it guarantees that people will do work yet allows them a lot of flexibility to do so.
3. I love online classes.
4. I thought the on line class was a great experience. It allowed us to do everything at our own pace pretty much. The only thing I would change would be the format of the content pages. I had a hard time downloading a lot of the material. But it was probably my computer. So I wouldn't change anything
5. It was great!
6. I enjoyed the flexibility that the on-line course afforded me. It made life easier because I work full time. You (Dunbar) 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.
7. The online experience was good for me. I have always been the kind of person who goes to lectures but doesn't really pay attention, and then I end up learning everything on my own later. So this class was perfect, I got to go over the material on my own at my own pace, and then interact with classmates online to see what I had missed or done wrong (mostly through comparing quiz answers to see what I had wrong). And I didn't have to sit through any lectures!
8. I enjoyed the convenience aspect of the class, but I like to be able to interact with my professor on a face-to-face basis. Especially you Dunbar! I miss out on your enthusiasm and sarcasm when I am at home taking the course. Overall this was a good experience for me.
9. 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 Dunbar 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 :-)
10. This is my first online class. It takes me long time to adjust myself. At the beginning, I was so scared because I didn't have any idea how to learn all those modules by myself. After I interacted with my group members and learned from each other, I feel much better. I like this class. I like the idea of self test and quiz. I think my first online class experience is good. I really enjoyed it.
11. Not much - good experience overall
12. I enjoyed it. It was the material that frightened me.
13. I liked the on-line format and I would do it again.
14. Nothing. I liked it.
15. Nothing.
16. Nada!
17. Nothing.
18. Nothing

Online learning is harder

1. I just think that as much as we interacted with you Dunbar, it's just that much harder because in the end, all of your hard work making the content modules, etc. has to be self-taught on a level that I don't think any of us are accustomed to (or fully capable of yet).
2. It was good, I am just not used to it as of yet. Requires different work habits.
3. 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. :-)
4. I personally feel that I would learn better in a lecture format instead of just reading over the computer. I like to listen instead of read. In my past courses, that is how I usually prefer to learn the material. I do better in a class if I go and listen during class instead of reading the book.
5. I don't see any areas where it needs any change except for the people in different time class rating the other people in the other section. (I don't see how we are able to get to know each other.) Time was critical for most of my ratings in question 7, I would like more of everything but time was limited. The online forces an individual to learn the stuff him/herself. If that person isn't self-motivated then it shows. At this level the teacher shouldn't have to push but guide. A teacher would just lecture about the material in the book, not much difference from online. The online experience was different but good. I would like to see as optional, doing questions in the book to supplement the online material. An excellent experience. See you in Fall.

6. 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.
7. I thought that it was fine, just make sure you let people know just how time consuming it really is. I was surprised at how long each module and quiz took me to get through.
8. Overall I thought it was a good experience; however I was not used to this style of teaching and had to get adjusted.

Better online access

1. I need a better connection that AOL over a modem!!!!!!!!!!!!!!
2. I would have made sure to have better access to a computer. It made it difficult, since the library has reduced hours during the summer, and the 24 hour room doesn't have excel, which means that example problems can not be displayed. Overall, I like the flexibility of an on-line class and I am overall extremely impressed with the preparation and organization of this class. I think that it was a difficult challenge: to motivate students who just graduated to put this much time into a class, during the summer, and be self-disciplined to do it on their own from a home computer. I am amazed at you, Dunbar. I think that the idea of an online class will be successful with you at the helm. Thank you for a wonderful experience.
3. 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.
4. 1. Want to have cable modem at home so that the internet is fast enough to deal with online course. This is my responsibility though. (However, want computer center to open all year long. Unfortunately it was closed for moving) and I am too poor to install cable modem or broadband. lol 2. Please do not arrange course at travelers center at daytime. Parking cost kills me even UConn credit my account. (I am still a very poor student since the first comment, lol.) 3. If I had adobe acrobat exchange, it would be cool. I could send the tax form online.
5. Get a working computer.
6. 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 would be better if the course was longer so we weren't trying to cram so much material into our brains. It was hard to absorb something in time to deal with the next concept. Overall I think the online experience helped me learn more than listening to an instructor. It forces you to really comprehend everything yourself.
2. I enjoyed my first online experience. It took a couple of times to get used to, but all went well. Perhaps this class could be offered in a full semester online in the future. A lot of material!
3. 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. Make the work load a little lighter - it took over my life!
2. The length of project - having to complete workpapers and the forms was tough to do in a group in the time allotted.
3. 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 think maybe a mixture of live and online. Have class live once a week and then other day people should be expected to learn on WebCT. Having the class live once a week or maybe once every other week would give students the opportunity to ask questions live instead of over AIM. I find it easier to ask questions live and understand the explanation live also.
2. I would have had 1 class a week be lectured and the other could be on-line. I feel like I didn't learn as much as I could have or as much as I wanted to because it was very hard for me to read from a computer for 4 or 5 hours a day without getting a headache or getting drained. Also, when I had questions it was a pain having to IM the questions only because it took so long when it could have only taken a few seconds if it were being done face to face. If you ever make this class not completely on-line within the next year (and the price goes down a lot!) let me know - I would love to take it again so I could get more out of it. This stuff interests me greatly and I really enjoyed you as a teacher. I just wish I had gotten more out of it. Not your fault at all though, it is just hard for me to learn on-line and teach myself.

3. 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.
4. Though I did get used to the online course after a while, it still would have been helpful to have a live course every once in a while. I think that if the online part of the course were 60-70% of the class that would have been better. I think some of the material would have sunk in better if I had it presented to me in classroom form.
5. A little more active learning and reinforcement in the classroom with the instructor.
6. 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.
7. I think that a combination of class learning and online learning would be best for this course. I had a lot of questions and talked to Dunbar frequently, but it would have been nice to be able to do this during a lecture.

Teach the class live

1. I really don't think that I could every really like an on-line class that much. There are too many things that can go wrong with technology like when WebCT didn't work for 2 days and the computers crashed during the exam. As an on-line teacher, you were great. You were always available and willing to help. I think the class would be great if it had one day of class meeting and a day of chatroom stuff with groups. I still feel like I need to be interacting with my teacher in person and taking my own notes. I realize how much work you put into this class, and if you didn't, I wouldn't have liked it all. You're a great teacher who cares so much about her students. That's rare to find nowadays.
2. I enjoyed the online experience but I still believe there is no substitute for live teaching. It is apparent that you put a lot of effort into preparing this class and I thought it was very well done. My biggest concern is that it is just too much info over too short a time period. And I personally feel I would have learned more with a combination of live teaching and online learning.
3. 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.
4. It just doesn't provide as much as the traditional ones do. I would be able to ask more and solve more with the traditional method. Also, the traditional method, the lecture, and speech of the instructor leave more stuff in student's memory with the hint of voice, gesture, etc. I could hardly remember the stuff before the mid-term when I took the final, although I studied hard.
5. I find self-learning to be harder. I like having a teacher teach me-I learn much quicker. Maybe I am against the norm, but I would take a regular class over an online class any day. It's just what I prefer.

Miscellaneous comments

1. Making the content module more like a story so that it's more similar to a live instructor. Sometimes I felt that the bullets in the content module left a lot of things blank.
2. An introduction to an online course
3. 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.
4. I think after having the first course online, I am now better prepared for future classes, and what to expect.

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. This is definitely the best online class I have taken so far. The use of multiple learning tools, group interaction, and your availability made this a positive experience.
2. I think this experience was good for me. This class required a lot of time, but the online course was helpful because I could do all my work from home when it was convenient to me.
3. Nothing. I enjoyed it, and I feel like I learned a lot more compared to other classes I've taken that were live.
4. I like the online experience. Again I would like to have more control of my own schedule and working in groups does not always do that. The class was intensive, but no more work than a regular class spread over 14 weeks.
5. I had a good experience.
6. 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.
7. I thought it was a good experience.
8. I enjoyed the online experience. The only reason I would have preferred a live class is because sitting at home, staring at a computer doing schoolwork all day can become tiresome and sometimes depressing. I would have liked to come into school and interacted with my classmates.
9. I liked the online course
10. I was fine.
11. Nothing
12. The experience it self was not bad at all, tax in general is just very difficult!!!
13. I thought that the class was good online. It would take a lot of time either way; it was more convenient to do when I had the time since there was no official class time.
14. Nothing
15. Nothing really, it was an enjoyable experience.

16. As far as online experience, this is the best by far compared to the 2 I've taken so far. I can't think of much to improve, except to add real presenter videos to the content modules and maybe more self tests and less excel spreadsheets.
17. Nothing
18. Nothing. I enjoyed it. :-)
19. Unlike other courses, I felt that this online experience was a good one. It required a massive amount of work but that is the only way it worked. Many of the other online classes I have taken, try to simplify the course because it is difficult to teach online. All that comes out of it is a busy work course that leads to absolutely no learning whatsoever. I felt that this course was different and I got more out of the tax class this time, than I did when classes were live. (Probably because I read so much from you I felt like I talked to you everyday).
20. I am satisfied with my first online course experience. One suggestion about an issue that's not technology related: I don't really think that we need to use the textbook. To be honest, I don't use my textbook often enough to make it worthwhile. Perhaps you can make that textbook optional in the future?
21. 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. At first I was frustrated with online learning because it took a lot longer than I expected it would. Being able to interact with you through AIM made the rest of the course a lot easier. It is stressful when assignments were due when the class didn't start, because my computer wasn't set up yet and I was still taking my undergrad. But towards the end it wasn't bad.
2. I had a real hard time in the beginning to the point of tears. We graduated sat. moved home Sunday and this class began Monday. I did not even have the Internet until Wednesday, which initially set me back too far and there were assignments and modules already due. I don't think the emails should begin before we graduate from undergraduate classes. That is just insane. Also I think the first class should be used to explain the technology needed and how the class will be formed and then begin with stuff on Wednesday. It made for an awful beginning but once I finally caught up it was better. This would just avoid the chaos. But I hate to admit I did end up liking this class and you. Not all instructors live on IM!!! HAHHAHA!!
3. 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. Get AT&T broadband at the beginning of the semester so that I had a faster connection and did not have to tie up the phone line in my house.
2. 3 words: My cable company. :-) Other than that, I think the combination of interaction with you (via AIM) and the online work was near perfect. It was tough, but I really enjoyed the class.
3. 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 believe the class is very good and the material is important but I could have spent more time on this course working online examples if it were spread over the whole summer 10-12 weeks with one quiz a week. I felt I didn't have enough time to cover the examples thoroughly. I found that I had to go back and pick the answers out of some of the modules because I didn't have time to understand what I read if I read it. I believe it would be possible to set up two 10-12 week courses and take two 6-week courses that were less strenuous in one summer.
2. It was stressful at times, but honestly I have had a great experience. The location in West Hartford was convenient, the online characteristic was convenient, the professor was always ready to help and to ask for a journal entry (hee hee), and the group interaction worked out well. The only thing that I wish was that this class was longer than six weeks. A lot of information was packed into that short amount of time.
3. 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.
4. It wasn't the online part; it was tough doing so much in such a short time
5. Personally would have not worked while taking this class. I felt so much pressure between all my responsibilities to get everything done. But that's just me. Other than that I thought the class went well.

Less of something

1. Less work
2. Shorten the amount of learning material.
3. It would have to be less time consuming
4. I think that there were too many times when we had to meet "live" (either online or in the classroom). My thought was that the online system was devised to help students who were working during the daytime. If that's not the reason for converting to online, then maybe this class (and others) should be taught in the classroom. What happens when the student is from out of state and they sign up for an online class?
5. I guess online is okay. I liked working through the content modules. But the chat rooms are not good. It takes too much time. And it's hard to predict. I wish it wasn't so group intensive

More of something

1. I think more examples (aka self tests) would be really helpful. There were more in the beginning modules and then they dwindled towards the end. Those really helped me to understand the material.
2. Actually do something when we meet for class and not just hand in the projects
3. I think that if there were more synchronous classes and videos this would help the experience.
4. I liked this class alot..however I would have liked to see more synchronous classes
5. I think presenting more videos and less projects would have helped.
6. 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
2. 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.
2. No online class at all!!! I feel this class must be taught live. It was torture.... although I learned a lot. I feel a person can do good in the class and not even learn that much. It took me hours just to print the material. I'm just one of those people who can't learn flipping web pages. I need to highlight and make my own notes. It seems like there's so many links that I'll never be able to keep track with what's where. I took another online class with this one and that one fit this structure better. I guess because it wasn't so intense.

Miscellaneous comments

1. I wish I knew in the beginning that I would learn just as well if I didn't print everything out.
2. Wouldn't want to be placed in assigned groups.
3. 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
4. A helpful book
5. Shorter quizzes, check numbers for the projects, make own groups,
6. I'm not sure at this time!
7. I'm not sure what could change online. I just couldn't stand staring at a computer for so many hours a day. I get really antsy and frustrated. Otherwise, it's good.

Print out notes

1. Put the notes in print, so students can print it out. Also the book is not worth the investment for this class. I never used it.
2. It would be easier to receive the notes at the beginning of the semester instead of printing everything ourselves. Thank you for being so accessible to us on AIM; that really helped me get an answer to a question immediately.
3. Have the lecture notes printed out for us.

EXHIBIT VII
University Course Survey

Summer 2001

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

Summer 2002

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