Sabbatical Report for Fall 2008

The demand for online classes is growing based on their convenience. I believe that both students and teachers agree that the learning and teaching of live classes are more effective than online classes. Maybe the effectiveness of online classes can never be matched by live classes, but using more technology can close the gap. The major focus of my sabbatical leave was to experiment with an actual online class (ACC 134 – Income Tax Preparation) by creating videos (sample video) as if I were lecturing to a live class. I had used Impatica for PowerPoint videos for the past few years but the video resolution, sound quality, and animation abilities were limited. I also supplemented the class with features available in Laulima and other online resources. Here is a list of specific activities and comment:

- Lecture Videos
  - Network Server
    - The videos need to be stored on a server so I had tried various sites with varying degrees of success.
    - Leeward Media Server
      - Limitations – include a special account had to be set up and managed.
      - Limited to wmv format.
      - Special support files needed to be created.
      - Mapping of network drive was easily lost.
    - ITS hawaii.edu personal webpage account
      - Limited capacity.
    - Laulima account
      - This appears to be the best site to house the videos.
        * Streaming appears to be reliable especially with fast Internet access on the campus.
        * Uploading files can be easily done with webdav.
        * Videos can be made private just for students who log in or public for anyone to view.
  - Video Software
    - I had experimented with a couple free versions of video software including Windows Movie Maker.
    - The most effective software I found was Camtasia Studio.
      - A site license with multiple copies can make the costs more affordable.
Software allows the capturing of all windows of a computer screen with concurrent webcam shoots with audio narration.

The video can be produced and edited within the same software.

Video Content

- Just like a classroom the easiest way to present a lecture is to use the materials provided by the textbook’s publisher.
- So most videos started with the PowerPoint files supplied by the publisher.
- Additional slides were added to each to present more visual and understandable material for students to view.
- A hard part of editing was to remove slides so the videos would not exceed 20 minutes. Not too successful for some slideshows.
- I rehearsed material to develop a narration and inking for all videos. PowerPoints handouts were used to develop the “script.”
- Even though PowerPoint animations can be inserted in slides, I believe a more effect and natural emphasis can be provided by writing on the screen or “inking.” This is similar to writing on a overhead transparency.

Videos developed for Fall 2008 – videos for the whole semester were developed during the sabbatical. Each of the below videos can range from a couple minutes to over half an hour. Due to the nature of the course, most videos must be updated every year.

- Chapter 1 Part 1 Video Lecture
- Chapter 1 Part 2 Video Lecture
- Appendix A - Tax Authorities Video
- Chp 01 Homework Problem 41
- Chp 01 Homework Problem 42
- Chp 01 Homework Problem 43
- Chapter 02 Part 1 Video Lecture
- Chapter 02 Part 2 Video Lecture
- Chapter 02 Form 1040A Video
- Chapter 02 Form 1040 Video
- Chp 02 Homework Problem 33
- Chp 02 Homework Problem 34
- Chp 02 Homework Problem 35
- Chp 02 Homework Problem 37
- Chp 02 Homework Problem 39
- Chapter 03 Part 1 Video Lecture
- Chapter 03 Part 2 Video Lecture
- Chapter 03 Calculating Tax with Qualified Dividends
- Chapter 03 Problem 35 - Cash Basis Income
- Chapter 03 Problem 38 - Calculating tax with qualified dividends
- Chapter 03 Problem 39 - State Income Tax Refund Income
- Chapter 03 Problem 40 - Calculating Taxable Social Security Benefits
- Chapter 03 Reporting income on Form 1040
- Chapter 04 Part 1 Video Lecture
- Chapter 04 Part 2 Video Lecture
- Chapter 04 Problem 55 Video
- Chapter 04 Problems 35 - 41 Video
- Chapter 05 Form 1040 Schedule A Video
- Chapter 05 Part 1 Video Lecture
- Chapter 05 Part 2 Video Lecture
- Chapter 05 Problem 31 Video
- Chapter 05 Problem 41 Video
- Chapter 05 Problem 54 Video
- Chapter 05 Problem 61 Video
- Chapter 09 Part 1 Video Lecture
- Chapter 09 Part 2 Video Lecture
- Chapter 09 Part 3 Video Lecture
- Chapter 09 Problems 21 & 22 - Child & Dependent Care Credit
- Chapter 09 Problems 25, 26, 27 - Education Credits
- Chapter 09 Problems 30 & 31 - Foreign Tax Credit
- Chapter 09 Problems 33 & 34 - Child Tax Credit
- Chapter 09 Problems 35 & 36 - Retire Svy Contrib Credit
- Chapter 09 Problems 39 & 40 Earned Income Credit
- Chapter 11 Part 1 Video Lecture
- Chapter 11 Part 2 Video Lecture
- Chapter 11 Part 3 Video Lecture
- Chapter 11 Problems 24-30
- Chapter 11 Problems 33-37
- Chapter 11 Problems 40-44

- Video and Audio Quality
  - It may be easier to rerecord a video than to edit out an error. If rerecording or editing is too much work post a narrative correction as a link to start the erroneous video so the user should read the correction before clicking the link.
  - Higher resolutions are necessary to see detailed words and numbers typically used in accounting lectures. The default setting may be set too low so experiment with higher setting before recording the actual video. Once you have a desired settings note them down so you can reused them for future video.
  - A higher audio a setting seems to be more effective and does not affect the file size as much as a higher video setting.
- Use a headphone mic to record the audio. The recordings seem to be cleaner than recordings with desktop or built-in microphones.
- To make the mouse cursor more visible in the video, turn on Camtasia’s feature to highlight the cursor with a colored ball. The ball size can be adjusted.
- To let viewers know you are clicking on the mouse button, turn on Camtasia’s feature to show a visual signal that the button was clicked.

- **Inking**
  - Even though Camtasia can record any window on the screen, it is best to put items to present in a PowerPoint show so the inking feature can be used on those items.
  - Inking is also available on tablet enable computers with most the Office applications (under the Review ribbon). When you ink on an Office application and lift up the pen, your writing is inserted as a graphic object on the document. Inserting more objects can be tricky because existing objects may be selected and moved versus inserting new inked objects.
  - Ctrl+P in PowerPoint to turn on inking pen. The felt tip pen is bolder than the ballpoint pen. Red ink is a color with more contrast than others.
  - If you find you need more writing area in a PowerPoint slideshow, blank out the screen (B for Black screen, W for White screen). You will be able to ink on the blank screen but when you return to slideshow the blank slide will disappear with its inking.
  - Inking is also available with Adobe Acrobat Professional.
  - Inking can be done with a mouse but it is much easier with a pen.
  - Inking is more natural to use on a tablet computer versus a digitizer. A digitizer requires more eye-hand coordination.
    - Sample tablet computers
      - Lenovo Thinkpad
      - Toshiba Tablet PC

- **Webcam**
  - A webcam is a good option to show the speaker of a lecture but the “talking head” image takes up valuable real estate on a computer screen. I have thus only used the webcam for my introductory videos. Here is a recent intro video using a webcam.

- **Future learning, teaching, and collaborating tools to research**
  - Elluminate
  - Halawai
  - Go to Meeting

- **Student comments on course and video content**
- eCAFE evaluations – ACC 134 Fall 2008 (one student mentioned wrong end of Likert scale was used).

- Online Office Applications
  - The technology trend is to use less desktop applications and more “cloud” applications including Office type software.
  - I introduced Google Docs to my online students for free online Office applications.
  - I gave a presentation of Google Forms and Docs at the UH TechTalk 2008 Conference.