

Personalizing the Online Classroom Using Tech-Smith's Camtasia or Microsoft's Windows Media Encoder

By Steven R. Mark, Ph.D.

Online instructors continuously strive (or should, anyway) to make their classes equivalent to the face-to-face versions by supplying the same content, providing the same activities, and using the same grading and evaluation rubrics. Until the last couple of years, adding video and audio to the mix was simply not practical.

Computers were not fast enough, software was overly sophisticated, and teachers as well as students did not have the training to be able to bridge the technology gap. Since the advent of the \$500 Pentium 4 computer and the explosion of accessories—including user-friendly software — considerably more opportunities exist for bringing the “human face” to the online classroom experience.

Perhaps the most common use of audio and video by teachers is the preparation of “mini-lessons” to provide explanation and expansion of topics and ideas. For my online classes I prepare three- to five-minute video clips using a webcam and then post the files to the course site. Students then access the files and “watch” them on their own computer. Yes, the videos are still too small for my liking, and yes, they are rather short, but at least the student can see hear me. Rather than a dull 60-minute lecture, my students can get the distilled, sound-bite version in manageable chunks.

My department requires that our majors purchase webcams of their own, and I require all of my students to prepare at least six three-minute video clips during the semester on various topics. I then take those clips and post them to

the course website and request that the students watch each others' clips, much as they would in a traditional brick-and-mortar building. Next fall I am going to develop a discussion forum wherein students will have to post videos rather than written responses to the threads and further increase the sense of community.

Evaluating student work

As I was grading yet another set of accounting homework files, I began to feel an overwhelming sense of futility.

Opening the Excel file, making comments, highlighting numbers in red, and then returning the file via e-mail with attached commentary suddenly seemed old fashioned. How would my students assimilate the feedback when they were already struggling with the concepts? Would my gibberish spread across the rows and columns make any sense to those who might read it? If I could create simple video clips to provide information in a lecture format, could I not also do the same with their homework files?

The answer was yes, I could. By using available software and my inexpensive webcam, I found I could capture their homework on video, make changes and additions, point to mistakes and successes, all while providing a voice-over. In other words, I could explain their errors and illustrate corrections as if I were sitting with them personally.

Because the software captures the file on video, my students do not “see” me but only hear my voice. Even so, this seems to be a huge leap forward from the usual practice.

I discovered that these techniques work just as well for text-based files, and I have incorporated the process in my online Business Communication course. Now I can explain the writing process, demonstrate business writing concepts, and critique resumes and cover letters. Student feedback was nearly 100 percent positive, and I found my students actually looking at their corrected documents and spreadsheets.

Not content to stop here, I have encouraged my students to use the same process to submit files using the voice-over to ask their questions or discuss changes I suggested.

Two-way personalization makes an even stronger connection between student and teacher across cyber-space. I am going to experiment with having students critique each others' work so they can develop peer relationships.

The equipment required is simple: a webcam, a Pentium 3/4 personal computer or Mac equivalent, and a headset. I use a Logitech Pro webcam, a Dell Pentium 4 PC, and a \$10 Staples headset, certainly nothing sophisticated or expensive.

For software, I use two products: Tech Smith's Camtasia Studio and Microsoft's Media Encoder 9.0. When I want to have lots of effects, I choose Camtasia; when I need a quick and simple video, I choose Encoder. Both are great products, both are easy to use, and both have their places in my arsenal of high-tech teaching tools.

Tech Smith's Camtasia Studio

Camtasia is a terrific program if

CONTINUED ON PAGE 5 >>

<< FROM PAGE 4

you want lots of effects and a more “studio” feel to the production process. You can select underlining, line-through, and highlighting. You can circle text, draw boxes and ellipses, and even place arrows pointing to specific areas that the student should pay attention to. You can select different pointer styles — I like one that has a hand with the index finger pointing — to jazz up the presentation. There are many other options that I simply haven’t gotten around to learning yet.

Camtasia Studio, which includes Camtasia Recorder, also has facilities for selecting different file types which is handy in case file size is critical, or in case you have a user who can only open certain files. The standard file type is AVI, which creates a large file. For example, a three-minute voice-over of a business letter can run 15MB or more. Using the Studio you can compress this into a WMV file of about 5MB that will run on Media Player, the standard product on most personal computers running Windows.

I have found Camtasia very intuitive, and although the sophistication requires practice to fully use all of the bells and whistles, even a rookie can produce a clear, playable file with only a few tries.

Microsoft’s Media Encoder 9.0

Media Encoder is a straightforward program that will allow you to produce very nice videos quickly and without a steep learning curve. I use Encoder for all of my instructional video shorts because I do not need any added features, but it works as well as Camtasia for evaluating student work. Media Encoder lacks the special effects such as highlighting and custom

arrows, but then it also lacks a price tag: the product is free from the Microsoft website.

Media Encoder defaults to producing WMV files, so no compression or manipulation is necessary. The files play on the newer versions of Media Player, although I have had some trouble with older machines of the Windows 95/98 variety and their versions. The settings in Encoder are straightforward, and you can easily set up a production line. I use VHS quality video and voice quality audio which produces clear files of a reasonable size.

Caveats and disclaimers

No technological revolution is without its glitches and pitfalls, and using video/audio is no different. Perhaps the most significant constraint is the student’s equipment. Although most of my students have entered the Pentium 3-4 era with Windows 2000 or XP, I still have a number of them with Windows 98 configurations and a few running Windows 95. Sometimes these students report difficulties playing the videos, or that the videos are blurry. Upgrading their Media Player to version 9.0 often solves this issue.

Another caveat concerns connection to the internet. Video files are inherently large, so trying to download a 15MB video file using a 28.8K dial up connection can cause long delays and sometimes a timing-out problem. As most Americans move to cable or DSL this will become less of a problem.

My final caveat is the file-size issue. Users have to think in terms of “chunks” of material, usually no longer than three minutes, which is about a 4.5MB WMV file. This could mean two files for feedback on a

long assignment, or simply selecting a few highlights to discuss from the student’s work.

Parting thoughts

Using products like Camtasia Studio and Windows Media Encoder can provide a personalized component to your online instruction that until recently was essentially unattainable. While there are limitations, and while the user must be careful, this mechanism can bring the student and teacher together across the miles, creating a kind of cyber-synergism that has produced — at least for me — lots of positive feedback.

I highly encourage you to try it once and see what your students think. Personally, I like using their names and talking through their homework with them because it brings me closer to what I miss most with online instruction — that bond that develops when my students become real people. Any personalization we can add only serves to improve the quality of student learning in our courses.

I encourage you to contact me if you would like assistance or simply the encouragement to keep trying. I feel certain your students will appreciate the time you invest as well as your personal attention.

Steven R. Mark is an associate professor in the Department of Business, Career, and Technical Education at East Carolina University. Contact him at marks@mail.ecu.edu. @

Copyright of Online Classroom is the property of Magna Publications Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.