

You Can Produce a Video Tutorial in Under an Hour—Even Your First!

Stephen T Anderson Sr.
Associate Professor
University of South Carolina Sumter
200 Miller Rd
Sumter, SC 29150
803-316-4296
stevea@sc.edu

Introduction

I had been searching for software which would allow me to create CD-based learning modules without the heavy learning curve often associated with such productions. The creation and distribution of a multimedia product via the web or on a CD can seem daunting to the inexperienced user. It is often assumed that the developer must have weeks/months of training and experience. It is also often assumed that you must utilize expensive and complicated software to produce and distribute such a product. It might never occur to you that a faculty member with very little technical experience might single-handedly tackle such a project. After finding and using the software we will discuss today for a few weeks, I offered a brown-bag workshop to other media-production-wannabees on my campus. After a very short “show-and-tell” similar to what you’ll see today, they were ready to set off on their own and start developing materials.

This paper and related session will introduce users to Camtasia™, a piece of software that is:

- Inexpensive
- Easy for a non-computer-faculty to learn its “basics“
- Useful to those wishing to produce multimedia learning modules
- Capable of more advanced features once the user is more experienced
- Flexible in that ALL SORTS of “presentations” can be produced including “PR” materials, web-tour productions, lab-based-recordings, software demonstrations, etc.

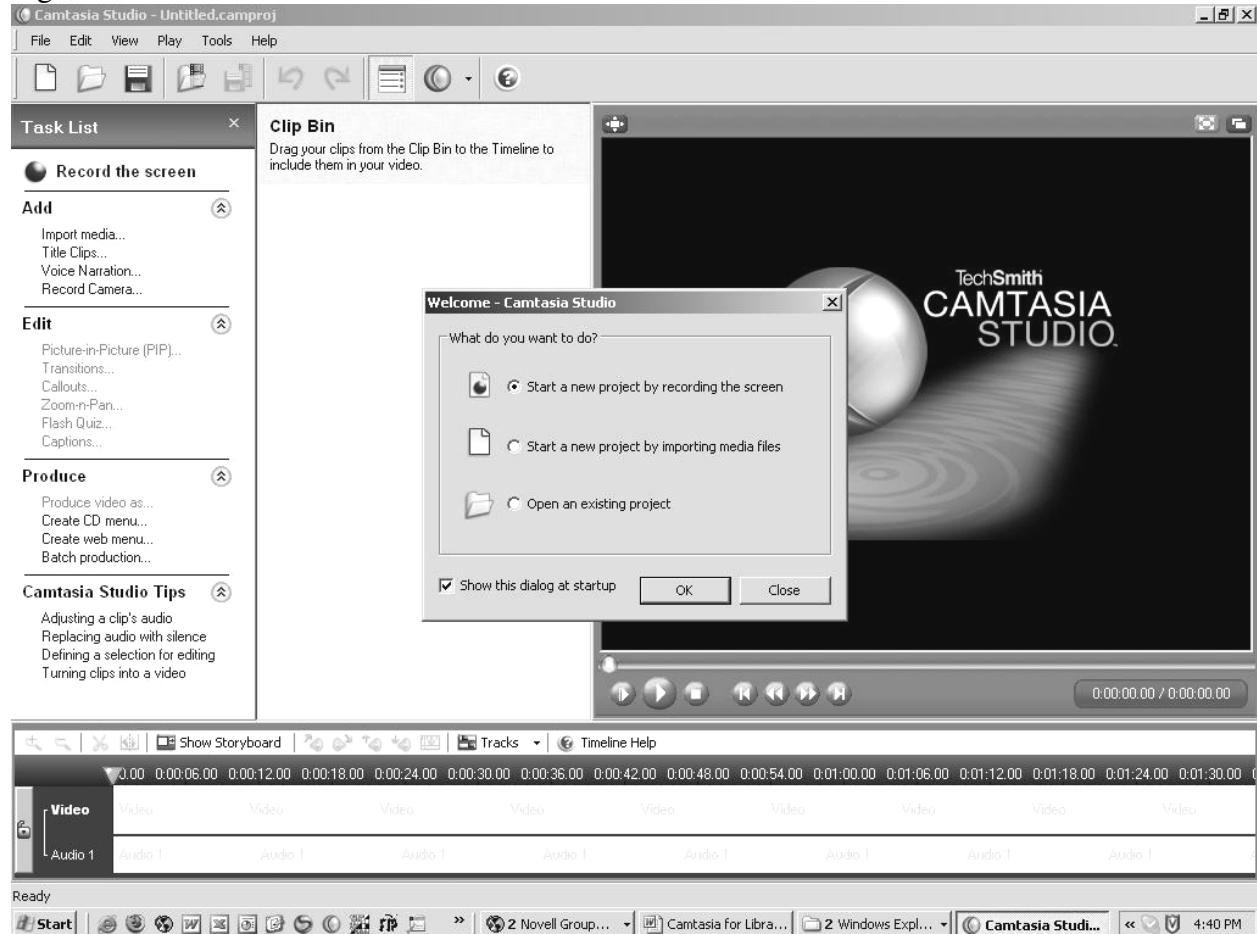
Basically, if you can see it on a computer screen, you can narrate it and produce a CD-based or on-line presentation with little or no training.

We will discuss the process of capturing video from cameras as well as screen captures, and we will see some typical examples of modules which have been developed utilizing this software. We will also demonstrate how to use Camtasia™ to actually create such a module during the paper session. The software discussed at the session are available for thirty-day trial periods from: <http://www.techsmith.com> and I will make CD’s available at the presentation as well. For those who feel they MUST walk away with something TANGIBLE, there might even be some Techsmith marketing “give-aways” which will be distributed at the paper presentation.

Camtasia Basics

The entire Camtasia screen is displayed in Figure 1. It is straightforward to navigate and after a very short while, we were quite comfortable with basic capture, viewing and editing capabilities.

Figure 1:



The four areas of the workspace include the task list (left section), the clip bin (center), the preview area (right) and the timeline/storyboard area (bottom). Note the dialog box near the center which has the option to begin a new screen capture, import audio/video files into this new project, or continue work on a previously saved project. The default file type for a Camtasia™ project is ***.camproj** and a project links all the video, audio and support files into one “project” file.

The following screen captures (captured by SnagIt™, also from Techsmith) display the progression of screens seen when opting to perform a screen capture. Figures 2-5 show that I have opted to capture a specific window by “selecting” it (by rolling the mouse over its title bar), then selecting if I want to narrate it and/or record from a videocam for a “talking head” effect or ANY other camera capture you desire. Disabling the display acceleration is advised for optimal performance.

Figure 2:

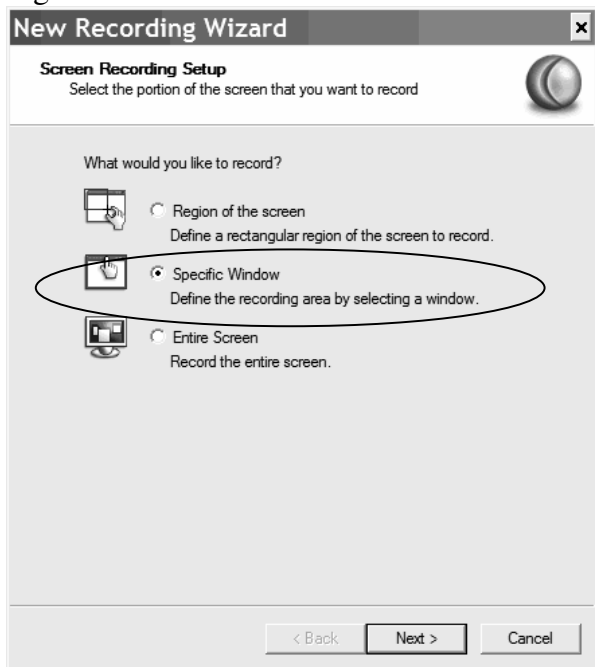


Figure 4:

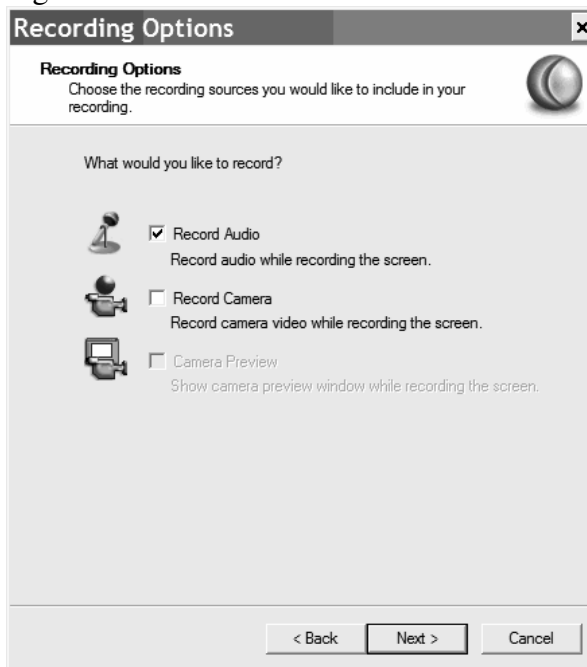


Figure 3:

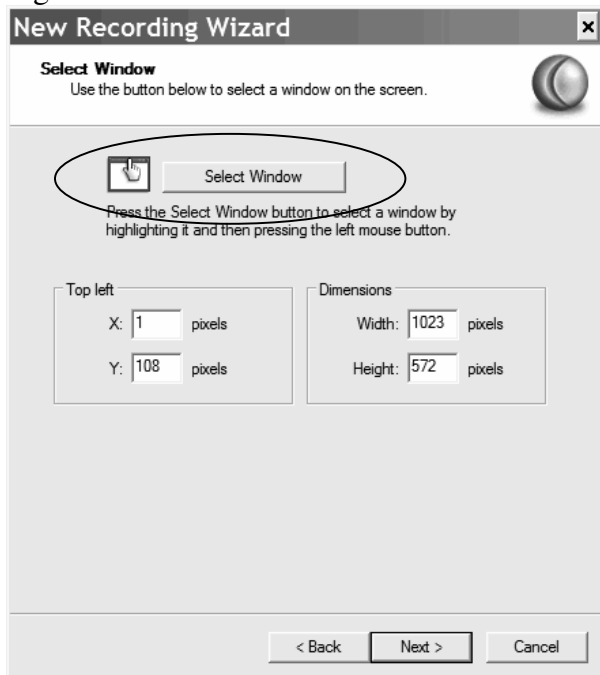


Figure 5:

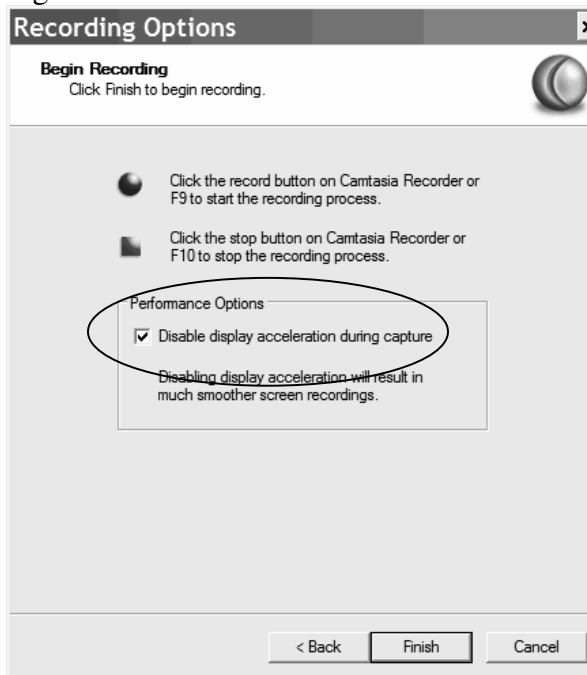
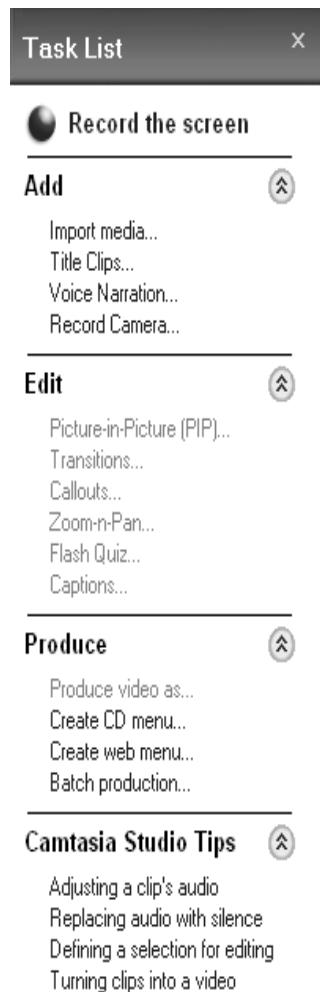


Figure 6:

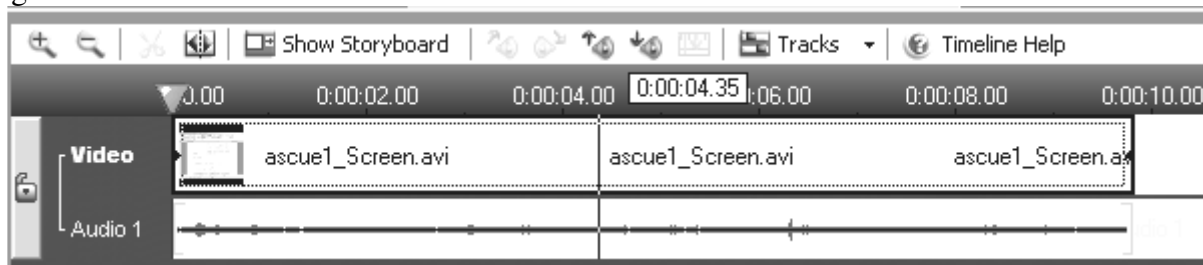


Although there are commands in the Task List shown in Figure 6 to “Import video, audio and images”, it should be noted that this importing directly from a digital device is NOT supported. To capture digital video from a digital camera (still or moving) you might want to utilize Microsoft Moviemaker, now freely available with Windows and at the MS web site. Many cameras have such software packaged with them, but you are encouraged to test others for ease of use and richness of content. Once captured onto a disk drive, you may import digital media files already stored on any disk drive.

Note the most unique command, **Record the screen**, allows you to start a screen recording, that is, a live capture of all or part of any part of a screen (you choose the exact region you wish to record activity on.) This definitely sets this software apart from most other video editing software. There are other software titles which now allow this feature, but we will not present a comparison here due to space limitations. Perhaps we will visit this in a future paper. All of them appear to have very similar capabilities. Some do things “differently” but end up with very similar productions when completed.

Once you have captured screen activity, or you have imported video, audio, or still images, they will all be displayed in the “clip bin,” from which they can be dragged down onto the “timeline” near the bottom of the screen. Once on the time line, the audio and video tracks are displayed as shown in figure 7.

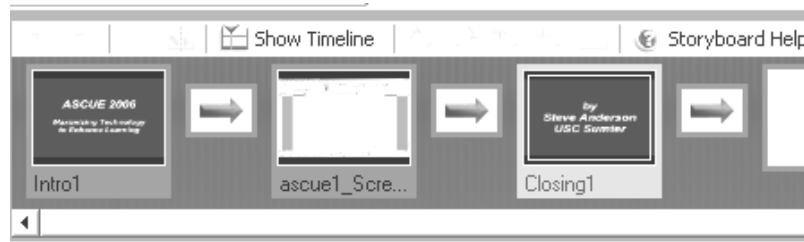
Figure 7:



As in most video editing software, the timeline has two “views”, a timeline view and a storyboard view. The timeline view (currently displayed) is more appropriate for micro-editing such as the deletion of small portions of the clip, etc. The storyboard is best for macro-editing, such as

the rearrangement of individual video clips and still images in a more discrete fashion as shown in figure 8:

Figure 8:



Note that I have created two “Title Slides” and I have dragged them onto the storyboard line at the bottom of the Camtasia screen. Note that in the storyboard view as shown in figure 5, the clips are viewed as discrete units which can be rearranged, even repeated, over the course of the finished video. Transitions can be added between clips for a more professional feel, or they flow one into the other continuously if no transitions are utilized.

As you are creating the storyboard, the video can be previewed in the preview area. Camtasia utilizes familiar “recorder buttons” to control playback as shown in figure 9.

Figure 9:



As you begin editing the video, especially when performing deletions, it is imperative to see the time line in MUCH greater detail so the exact boundaries you wish to delete can easily be identified.

In figure 10, I have zoomed in so the timeline shows much greater detail (those measurements are SECONDS!)... essential to deleting EXACT audio clips as this allows us to drag the marker much more precisely. Small movements (nudges) can also be made with the Step Back and Step Forward buttons in the Preview area. We see how Camtasia clearly identifies the exact highlighted portion in the clip with triangular markers which are placed by clicking and dragging. The selection can be totally deleted using the delete key or the scissors icon identified below. Also, a clip can be split apart at a given point using the split icon. The audio volume of the highlighted area can be increased, decreased, deleted, faded in or faded out with simple mouse clicks. The options are quite rich.

Figure 10:

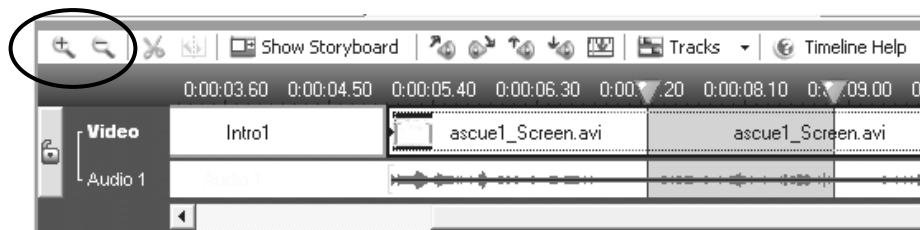
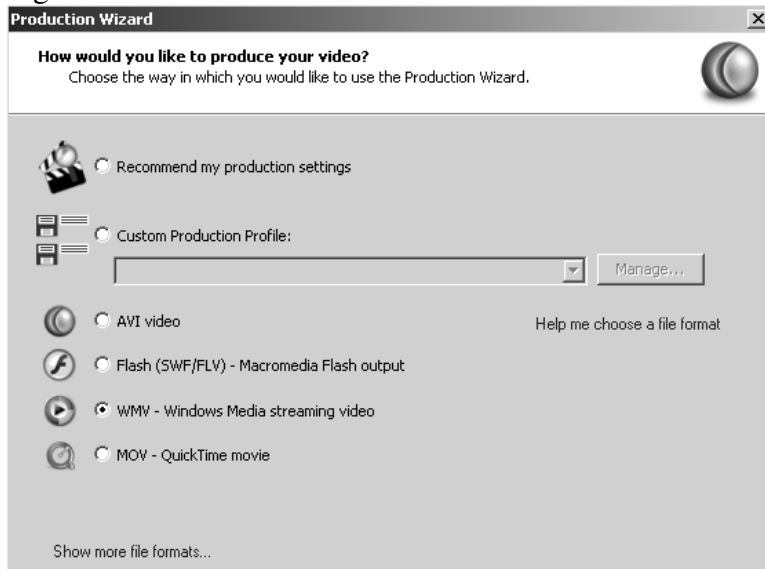


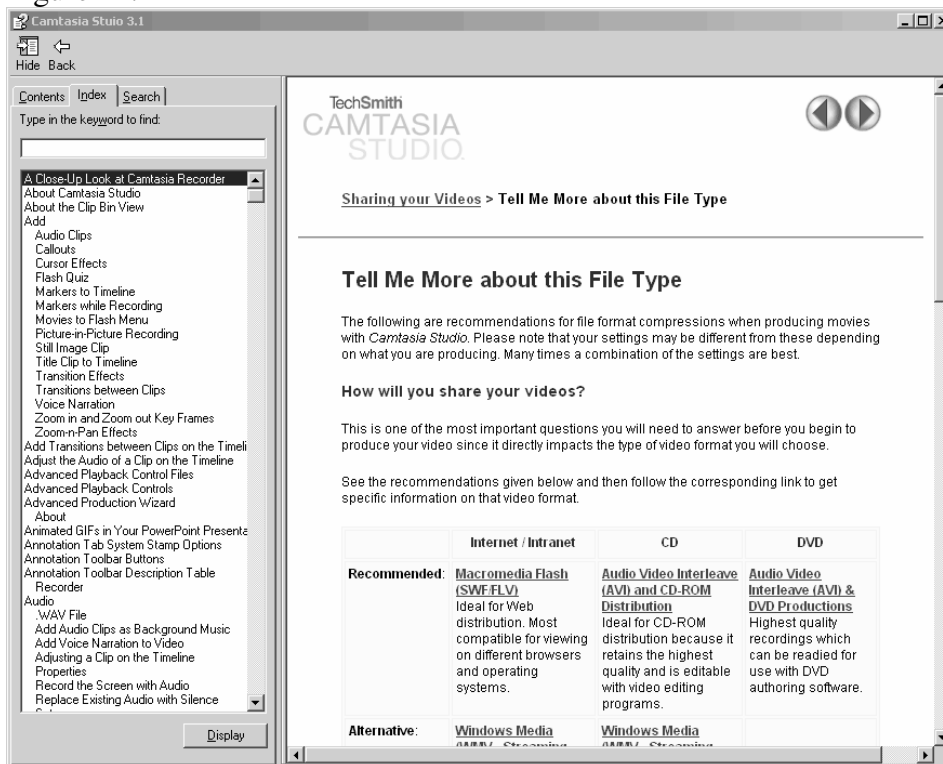
Figure 11:



Once all editing changes have been made, it is time to “produce” the video. Camtasia is very rich in production output file format options including AVI, SWF, WMV, and MOV formats. Each has their plusses and minuses and Camtasia tries to guide you as to which is appropriate as shown in the dialogue box in figure 11 below... using the “Recommend my production settings” option shown.

The extensive Help features (Figure 12) of Camtasia are some of the best tutorials on video production I have seen. They are simple, yet reasonably complete. They get technical enough for the savvy, yet the techno-lingo can be glossed over with little or no loss of information for the less savvy.

Figure 12:



Publishing Videos on Blackboard

Most of us are utilizing a course management platform, and we could argue all day as to the benefits of each (just as we could video production tools such as Camtasia™). The University of South Carolina has committed to Blackboard as a course management platform. When it is time to distribute a video you have created, there are many options. Camtasia™ conveniently produces not only the QuickTime, AVI, Flash or WMV video file format, but also the entire set of support files, including an html “cover page” to quickly publish your results to any web server. It conveniently creates a folder with all the necessary files so you know exactly what files need to be FTP’d to your web server. I have captured a few windows of this process to demonstrate its ease of use:

Figure 13:

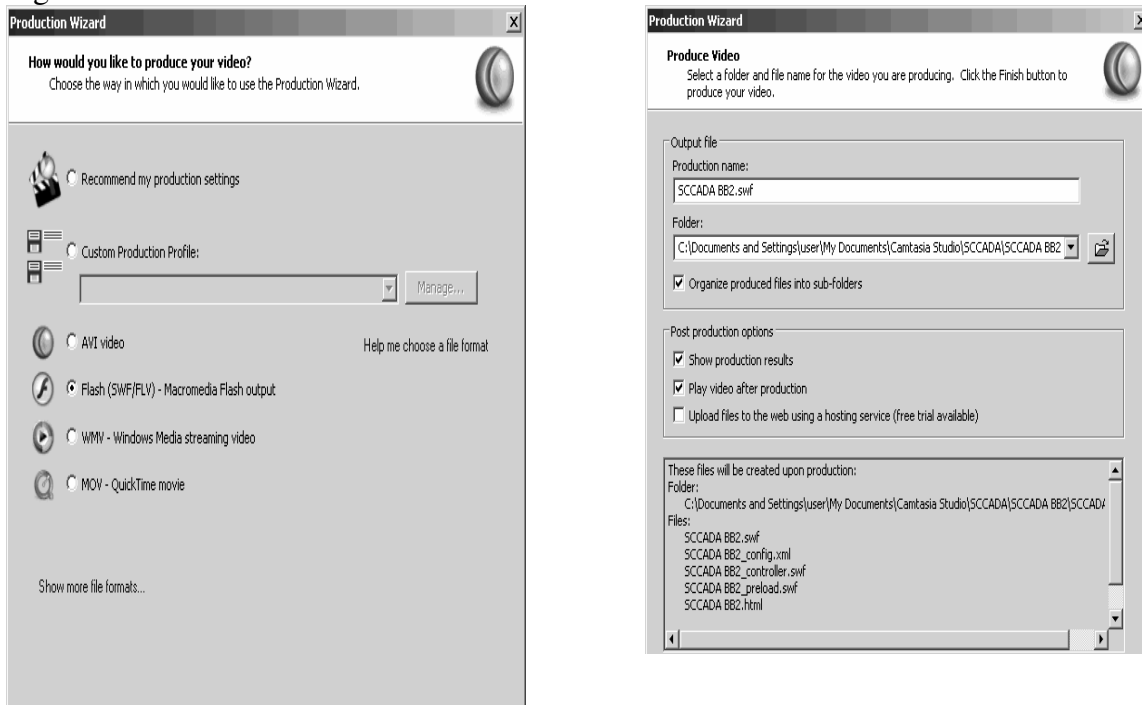


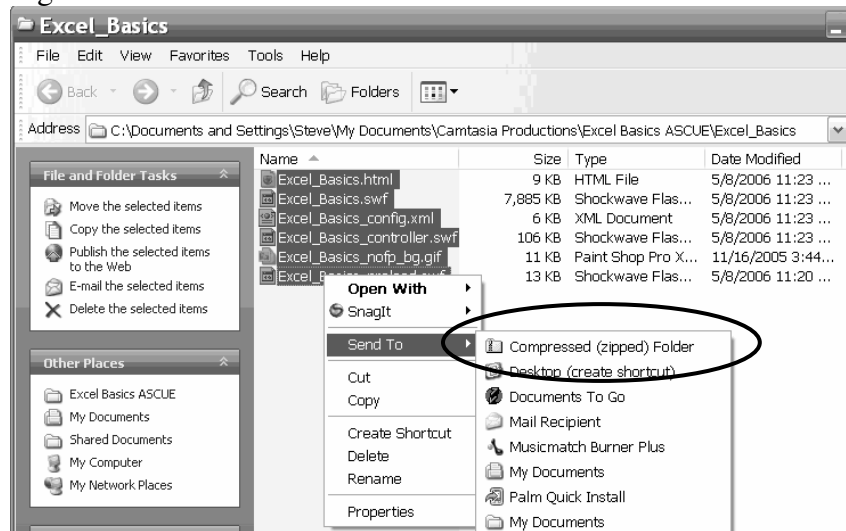
Figure 14:



It does take quite a few minutes, depending on the speed of your processor, to produce the videos. This CPU-intensive process can be scheduled as a batch production job in the “after-hours” as it does intensely utilize the system. Plan on a one-to-one ratio, where a 10 minute clip will take around 10 minutes to produce. Screen capture takes a bit less, but full motion requires LOTS more processing time.

Once the files have been produced, they can be “zipped” into one file to make it easier to publish on Blackboard. I simply highlight the entire set of files (Camtasia saves them all in one folder) and right-click and choose “Send To” a compressed file.

Figure 15:



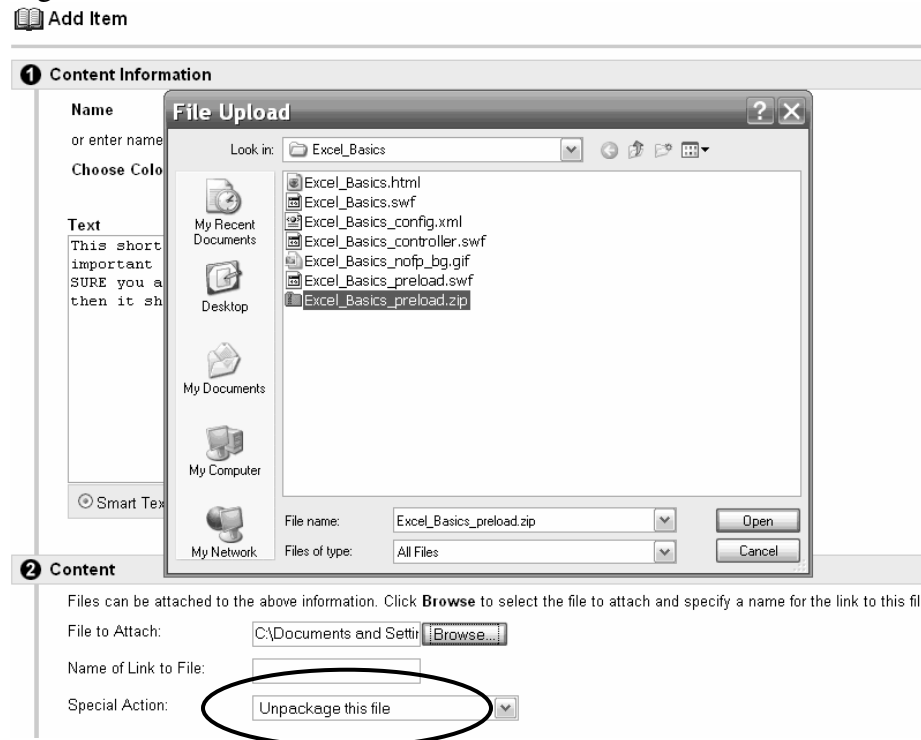
After the “creation” of the zipped file, it is time to publish it to your Blackboard course site. I use “Manage Course Menu” in the Control Panel to add a content area I call Video Tutorials which creates a separate button on my BB site to point to the tutorials as shown below:

Figure 16:



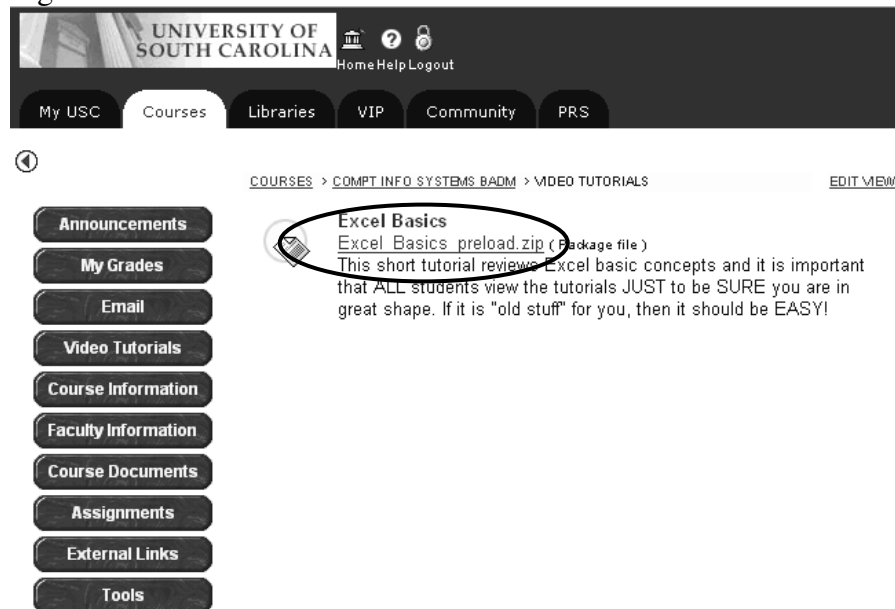
I then use the Control Panel to “Add an Item” to the content area **Video Tutorials** I created. I identify the “zipped” file as shown below and choose the option to “unpack this file”

Figure 17:



At this point, all the student need do is to click on the Video Tutorials button to find the following screen, then click on the link for the zipped file:

Figure 18:



Next we shall review some of the many situations where we have utilized Camtasia™ to build video learning materials.

Camtasia in Action

The most prolific application I have identified is the creation of support materials for my hybrid classes (traditional class format with a large on-line contingent) which are highly quantitative in nature. My Statistics and Production/Operations Management classes benefited from the video tutorials I produced which they could view many times, both before and after the material was presented in class. Their feedback was very clear... they LOVED the ability to “listen and watch” the virtual lectures, especially over material near the end of the course when it got more challenging. It allowed me to spend more time in class identifying the real challenges they faced in learning the materials since they spent LOTS more time going over it by themselves. It tended to prevent the “paralysis” involved with feeling SO LOST that they simply could not pick up the book or even feel like they could ask an intelligent question in class. It was much more effective to “go over a portion of the video clip” than it was for them to generically identify that they “don’t understand the material.” We could play portions in class and discover weaknesses in their logic (or weaknesses in the tutorial which leads to improved productions!)

Another example of how much difference there can be was a project I worked on with a group of Psychology students. They were creating a film clip of child activity levels after consuming various snacks, some high in sugar content, some high in artificial sweeteners and a third group of natural foods. They had to splice 55 minutes of film footage on four cameras into around 5 minutes of footage displaying “typical activity levels.” Then they had to build three “front ends” to introduce the test condition being viewed... but they used the exact same footage in all of the clips. The test, you see, was NOT about the student activity level, but rather in measuring the bias of the audience as to their predisposition in believing that sugars and/or artificial sweeteners might cause behavioral differences as compared to natural snacks.

Our first attempt at producing the 7 minute video was to use AVI format since it was suggested for highest quality CD-based distribution. The resulting file was “Packed and Showed” and resulted in a zip file (with the CODEC and Player hidden in it) of over 1.3GB, larger than a CD! We lowered the screen recording size to 640x480 and got it to fit on one CD at around 650MB. The second two we chose to use WMV format and the same 640x480 option. The resulting file sizes were approximately 14MB, a huge savings. Granted, the WMV files were a touch blurry compared to the AVI format but the loss was acceptable. In hindsight and greater lead time (remember that STUDENTS were involved—of course I NEVER PROCRASTINATE!!!) we would have tried other options such as increasing the sampling rate to improve quality at a modest file size increase.

Another project involved the development of multimedia library materials and another wonderful add-in Camtasia offers is the ability to create menu systems and HTML support pages automatically. This enables us to export (FTP) the resulting files to a web server with ease and have our productions available quickly. We did learn some important points. If you are utilizing the screen recorder to produce a “class” (like I did to supplement my on-campus classes while I attend the conference) then you should minimize the “editing” to save time. Students tolerate our hesitations/slips/etc in class, so they do not tend to freak out when we do them on “tape.” Large bloopers can be deleted easily, especially if you remember to leave some hesitations every so often which allow easier editing later. Also learn to utilize the F-9 function key to pause the recording if you get “flustered” or interrupted during the recording process. I used it a lot while recording

at home near or four dogs and at my office if the phone rang or the door slammed in the hallway outside my office.

Summary

In summary, we found Camtasia to be an excellent screen capture as well as overall video editor. It is filled with useful help, costs a very reasonable amount, has many output options to help control file size, and has useful menu generation programs to help you produce a professional output without having to become a super expert in multimedia production. The students learned it quickly as did the library staff who attempted it. We do not have everyone on board yet (but then not all need to use it either). If you get interested in learning more about the costs and features of Camtasia and/or SnagIt, visit the Techsmith web site at <http://www.techsmith.com> Current educational discount pricing as of 4/20/2006 is as follows:

Standard Licensing Options	
Single User Education Pricing	
SnagIt	\$24.95
Camtasia Studio	\$149.00
Camtasia Studio / SnagIt Bundle	\$169.00

Techsmith has also donated a copy of some of their software to “raffle off” at the ASCUE conference business meeting. I usually bring other promotional give-aways which I will distribute during the paper presentation (sure—bribery does work sometimes!)