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Desktop Video Editing: Where We Are Now

by Tim Stahmer

Published four years ago in the Spring VSTE Journal was an article written by my partner in multimedia, Sharon Tomkins, and me that detailed using desktop video editing in your classroom. At the time, we were writing about a relatively new program, Avid Cinema, which was the only inexpensive, easy to use package available for teachers. It was, however, a big leap forward for prospective videographers like us (with little money and even less time). Despite the bugs, we finally had a program that would allow us to take miles of videotape and easily edit down into a form that people would actually watch.

So, where are we now, four years later? For one thing, Avid Cinema is gone. However, the tools that have come to replace it have made editing video on personal computers even easier. Today, video editing as tool for the classroom, is more accessible than ever.

In the original article we outlined four steps to producing a video project: planning and recording the video, importing the video into the computer, editing the movie and exporting the movie back to the camera. These steps haven't really changed, although planning should probably be a step by itself since it is the most critical piece for a successful final product. A good plan for your project will save many hours and many headaches down the line.

While the need for a good plan hasn't changed much in four years, the cameras certainly have. The large analog cameras we used in 1998, the ones that had to rest on your shoulder, have given way to small digital cameras, some of which fit in the palm of your hand. And, while the prices are not what you would call "cheap," they are very reasonable for the high quality of the video and extensive list of features you get with most models.

Good, basic digital camcorders now sell for under $600. Models with advanced features, such as the ability to record good quality video in low light situations, which sold for $10,000 four years ago, are less than $1500. Analog camcorders are also smaller and cheaper, starting at less than $200, but anyone serious about video will want a digital

Desktop Video Editing, continued

camera. In addition to better quality video to start with, digital information transfer to and from the computer will very little loss in quality.

(If you'd like to know more about camcorders and how to buy them, read this article on the How Stuff Works web site: http://www.howstuffworks.com/camcorder.htm)

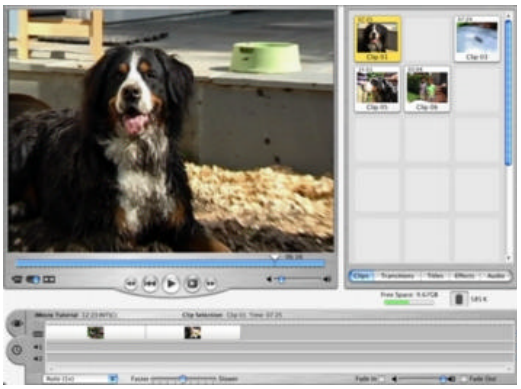
While the development of relatively inexpensive high quality cameras is a large factor, another piece of technology that has made desktop video editing much easier is FireWire. Invented by Apple Computer, FireWire (also known as IEEE-1394 or iLink in Sony's world) is a protocol for the high-speed transfer of digital information between devices. Almost all digital camcorders come with a FireWire port and the programming that allows the camera and editing software to talk over the FireWire connection.

At the computer end, all new Macintosh computers have come with FireWire ports for the past two to three years. Many Windows-based computers are now shipping with FireWire cards installed or they can be ordered as an option. A FireWire card can also be added to many computers for less than $50.

So, step one is to plan the project and record the video. And, with a digital video camera, we have the means to easily transfer that video to the computer with very little loss of quality. Next, we need some software to allow us to edit the video down into a length and format that will tell the story we want to tell.

For many Macintosh users, that part is simple. An excellent video editor came installed on their hard drive in the form of iMovie. Although the interface of the iMovie software resembles the old Avid Cinema in many ways, there are many improvements that make the editing process so much easier, not to mention having to deal with fewer bugs.

One of the best features of iMovie is that the software will control the camera for you. With older programs using analog cameras, the process of transferring the video to the computer often required two people, one to work the camera and one to operate the software. Now, just plug the camera into the computer and run the software. iMovie will start and stop the camera and show everything on the tape as it is being played.



The actual editing process has also been made easier and is now a matter of drag and drop. As the video is imported into iMovie, it is placed in a holding area called the Shelf that looks a little like a slide rack. In fact, the program can be set to separate each scene in the video into clips and place them in the rack automatically. Once there, the scenes can be dragged into the time line in the order they are to be seen in the final movie. Each clip can also be edited

Desktop Video Editing, continued

using the now familiar cut, copy and paste functions found in almost every piece of software.

After the scenes have been placed, then it's time to add a little spice to the movie. As with earlier programs, transitions between scenes can be inserted, titles can be overlaid for identification or credits and audio can be placed behind the video. iMovie allows for drag and drop placement of transitions and titles into the movie.

Once the movie has been edited, iMovie also makes it easy to export the final product. Depending on the equipment in your computer, you could have three choices for the final format. The most basic of these is to record the project onto video and iMovie will take care of that automatically. Just make sure the camera is connected using the FireWire cable and turned on and that it has a blank tape in the drive.

A second choice would be to export the video to QuickTime format. While earlier programs also supported QuickTime export, iMovie offers many more options. Depending on the setting you choose, your project could be posted to the web, added to a CD ROM, inserted into a PowerPoint presentation, or used in any application that will accept video.

The third option is to burn the video to a DVD. Many Macintosh models come with a DVD burner and a piece of software called iDVD that makes creating a DVD that will play in most standard players. If you choose, iMovie will export the final product to a format that iDVD can easily use.

That's fine if you have a Macintosh, but what options do Windows users have? Actually, there are several inexpensive software packages to choose from. Most labeled DV will work with FireWire to send video to and from most digital cameras and the process of editing the video is very similar to that in iMovie. The best reviewed of these is the Pinnacle Studio DV package which sells for around $130 and comes with a FireWire card for the computer. Before buying any video-editing package, however, do your homework. Make sure that the product will work in your computer and that you have plenty of hard drive space remaining.

Even with all the technological changes to the process of desktop video editing, there is still one part that hasn't changed - the question of how we are going to use it in the classroom as a learning tool. As with all technology, even if it is very accessible and easy to use, it shouldn't have a place in the classroom it unless it helps students learn.

In the Journal article four years ago we discussed several ideas for using video in the learning process. Most of these suggestions are still valid and are reproduced here:

- Students, instead of writing about what they did last summer, can edit the pictures they took into a video diary. (Teachers could do the same.)
- Role-playing activities take on a whole new meaning when they can be taped and edited into a presentation for the class.

Virginia Society for Technology in Education
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Desktop Video Editing, continued

- For the science fair, students could video tape the procedures they used in creating their project and edit it to show the process behind the final product.
- Students could complete a research assignment, analyze the information and present the salient points to the class.
- Selections of student work can be summarized to videotape and taken home for parents to view.
- Foreign Language portfolios of student progress can be recorded to CD-ROM.
- At Back to School Night, a short video could tell more about the school than dozens of talking heads.

As we also noted in 1998, video is not a technique for everyday use. It is, however, a powerful tool for both students and teachers to present information, opinion and creative ideas. The combination of digital cameras with inexpensive, easy to use software makes video editing an even more compelling option for classroom use than it was four years ago. And, I expect, it will only get better.

References

More articles about video editing in the classroom, including links to tutorials and product comparisons, can be found at http://www.assortedstuff.com/otherstuff/

About the Author

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