Introduction to digital video

Have you seen some of the amateur video productions lately? Not the ones at film festivals. We're talking about the ones produced by the kid next door. Anyone can do it!

Today, the tools for producing excellent short films are affordable and easy to use. Those tools can empower students of almost any age to produce personal masterpieces—complete with the look and sound of Hollywood productions. It's also a snap to share the finished product on DVD, the web, and virtually anywhere else.

Can I really make a movie

YES! Shooting and editing video is fun and easy. With today's technology, you can make your movie dreams a reality.

- Bring the excitement and energy of film festivals to classroom projects.
- Create a short movie with video footage of the next family gatherings that everyone will enjoy.
- Take a Saturday and turn that storyline or soap opera drama you have been thinking about into a movie for others to see.
- For your next school project, make a movie that will impress everyone and show how much you know.
- Turn the one-hour raw footage of a birthday party or baseball game into a snappy three-minute movie that you and your friends will be happy to watch over and over again.

Going digital with video

Shooting and editing video like a professional is now possible for anyone with an up-to-date computer, an inexpensive digital video camera, and editing software like Adobe Premiere Pro CS6. With today's digital video tools, you too can say, "Standby camera, standby talent, roll tape, ACTION!"

Getting started with digital video

Creating videos using today's technology is fun and easy. You can create anything from a five minute movie about your vacation to a feature-length film. All you have to do is get the right tools together and try it!

Making a movie can be done with a slide show of digital pictures or video footage captured on a digital video camera. Either way, you can add music, sound effects, voice-overs, titles, and special video effects to make your movie something that will entertain your friends and make you want to watch it over and over again.

Beware! Once you start making your own movies, you will never watch another movie the same way again. You will begin to notice things like camera angles, use of music, and special effects. Every moviemaker becomes a critic.

Let's get started putting the pieces together and begin capturing your memories on video and editing them into something you are proud to pull out or send around. This is not your boring slide shows of old. This is a moviemaking revolution. So grab a digital video camera and get started.

The making of a movie

There are many different types of movies, and each one is made differently. However, they all go through the same basic process.

Preproduction

Preproduction is everything from thinking about a movie all the way to writing a script (if one is used). You first come up with an idea of what you want. It could be simply to record a family vacation, or it could be to create a school project on the Civil War. Either way, some forethought should go into every production. At the very least, you should jot down what things you want to have in the production.

© 2012 Adobe Systems Incorporated

Take, for example, a family vacation. It is a good idea to think about the things you will do on that vacation and make sure that you have a little footage of each important event. Planning ahead helps you not forget some critical piece of the movie. For this type of preplanning, a *shot list* comes in handy. Here you simply list the shots you want to have and check them off as you get them. You can always add footage to the list, but thinking about the core elements of your film ahead of time is always helpful.

For more formal productions involving many people, you may want to prepare a script. A script will put all the members of a production on the same page, so to speak. The two-column script is most useful for video productions because it tells the actors what to say, the camera operators what and how they should shoot, and the editors how they should put it together. In the left column are all the visual directions, like fade-in from black and extreme close-up (XCU). In the right column are the directions for what the talent should say.

The ultimate in preplanning is the use of *storyboards*. Here you draw every shot and also list camera movements, talent directions, and lines. Nothing is left to chance with storyboards.

Production

Capturing action for a film is an art form. Camera operators have a lot to think about while they are taping. A camera operator must be concerned with what is in the picture and what is not, whether there is enough light, and whether the camera is picking up the sound of the action or not. Anyone who has picked up a video camera at a family gathering knows that it is work. Filming changes your perspective from someone who is involved in the gathering to someone who is observing it. A little preplanning can help you determine what is important and what is not. That way, you can pick up the camera only when you need to rather than tape the entire event, worried that you might miss something important. For more formal productions that involve a script, this is where the production moves from abstraction to reality.

Several pointers will help you better capture the action on tape:

First, determine what you want to tape. Decide what is most important and make sure it is most prominent on the screen. If what you are highlighting is the happiness of a particular person, move the camera close to that individual so that you can see the expression on his or her face. If what you want to show is a large family gathering on a lake, back up so that you can see all the members of the family and the lake. In filmmaking terminology, this is called the *field of view*. During a production, it is a good idea to mix up the shots so that you get a sense of surroundings and emotions.

Second, follow the *three S's* rule—Straight, Steady, and Smooth. For best results, you should use a tripod whenever possible. A leveled tripod will keep your video camera straight and steady. When you pan the camera left or right or tilt it up or down, you want the movement to be smooth as well. Try to avoid the zoom as much as possible. If you do have to zoom, try to also make it smooth and slow. Over-zooming is a frequent mistake of all amateurs.

Third, make sure that you have the right amount of light. Video cameras struggle to figure out how much light they should let in. If you position a person in front of a window with lots of light in the background, the camera will think that it must not let in too much light and will darken everything else, leaving your person as a darkened figure against a bright background (**Figure 1**).

Likewise, a person in direct sunlight will have deep shadows under their eyes as the camera struggles to deal with the other bright spots in the shot (Deep Shadows pic). It is usually a better idea to shoot video in the shade, to even the light and eliminate deep shadows (**Figure 2**).

 © 2012 Adobe Systems Incorporated

Figure 1 Backlit subjects

Figure 2 Fixing deep shadows effect

Fourth, make sure the camera can hear what it is supposed to record. Remember that the closer the camera is to what you want to be able to hear, the better. The camera is going to record the sounds of whatever is closest to it better than those sounds that are far away. Most cameras also have the ability to attach an external microphone to assist in picking up the right sounds.

While these four things are listed in order, they all have equal importance in video. Nothing is more frustrating than watching a video in which you cannot hear what you are supposed to, or see what is going on, while being made sea sick by a handheld camera that is zooming in and out. These four skills separate the professional from the amateur. If you pay attention to them, you too can shoot like a pro.

Postproduction

Postproduction is where you will bring your masterpiece to life. Today's computers, running editing software like Adobe Premiere Pro CS6 lets you capture video from a camera, view your raw footage, trim the clips for the best parts, sequence them on a timeline, and add titles, music, sound effects, and special effects. With Adobe Premiere Pro, you are working with roughly the same technology professionals use to create documentaries, sitcoms, news broadcasts, and feature films. With some extra effort, your videos can have the same professional look as those you see on TV and at the movies.

Initially, you will have to copy the footage from the camera to your computer. Be forewarned that even digital video tape cameras transfer video from the camera to the computer in real time, so if you shoot an hour of video, it will take an hour to download that footage to the camera. Video also consumes huge quantities of hard drive space, so the more hard drive space your computer has, the better. During the process of downloading, you should watch the footage so that you can see what you have and begin to put the movie together in your mind. There are also professional video cameras that capture video directly to a digital file, without the use of tape. These tapeless video formats are also supported by Adobe Premiere Pro CS6, but are typically too expensive for most new videographers.

After the footage is on the computer, use the assembly cut, rough cut, and final cut stages to work with the footage. In each stage, you work with the entire production with increasing precision. You can spend way too much time in the editing phase trying to achieve perfection. Keep in mind what Steven Spielberg said: "Movies are never finished; they're just abandoned."

Distribution

You have finished your masterpiece! You are ready to share it with others. In the digital world, there are many options for getting your movie out there.

© 2012 Adobe Systems Incorporated

Burn it to a DVD or Blu-ray disk

With Adobe Premiere Pro and a computer with a DVD or Blu-ray burner, you can make your own DVDs, that can be played on almost all modern DVD and Blu-ray players.

Send it by e-mail

E-mail is a fast and inexpensive way to distribute your movie, but you will have to compress your movie to make the movie file smaller before you send it. Your editing software, like Adobe Premiere Pro, includes export options for producing e-mail compatible files, but, in doing so, it also reduces the quality of the picture and shows the movie in a smaller window.

Post it on a web page

These days, most people expect to be able to view video over the Internet. If your intended audience has high-speed Internet access, the quality of the video on a web page can be better than that in an e-mail message because you will not have to compress it as much.

Put it back on the digital video camera

Another option you have is to put the movie back on the digital video camera. Saving it back to your camera is a good way to back up your movie, using a MiniDV tape.

To play it back from a MiniDV tape, you can then use your digital video camera like a VCR, and plug the camera into your TV. The difficulty here is having to plug your video camera into the TV each time you want to watch a tape.

 © 2012 Adobe Systems Incorporated