

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 Elements. 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. With an inexpensive digital video camera, computer, and software like Adobe® Premiere® Elements, 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 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.

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 column on the left are all the visual directions, like fade-in from black and extreme close-up (XCU). In the column to the right are the directions for what the talent should say. If you are a teacher asking your students to produce a video, having your students turn in a script before they begin production is a very good idea.

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. If you are an elementary teacher and want your students to produce a movie, the use of storyboards can be very effective at getting younger students to the point where they are ready to shoot footage and put a movie together.

If you are a teacher who wants to have students produce a video for a project, a student video project proposal form is an excellent way to get students to do a certain amount of preplanning and let you know what they are thinking. Have your students fill in this form to help them organize what can be a complicated process.

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. Take a look at the different shots below and notice that the Extreme Long Shot highlights the surroundings of an individual while the Extreme Close-up highlights the expression on a face. 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 of 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.

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.



Subject in Full Sunlight

Deep Shadows



Using Reflectors

Shadows Filled



Shading Subject

Even Lighting



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 Elements, let you download, screen 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 Elements, 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 download the footage from the camera to your computer. Be forewarned that it transfers 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 (about one gigabyte for every five minutes of video), 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.

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.

Burn it to a DVD

With Adobe Premiere Elements and a computer with a DVD burner, you can make your own DVDs, which can be played on almost all modern DVD players. Blank DVDs are about \$1 each, making it possible for you to share your video masterpieces with anyone who has a DVD player. Some older DVD players, however, may have problems viewing a burned DVD.

Send it in an e-mail

E-mailing your movie 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 Elements, will reduce the size of the movie file for you, 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

With Adobe Contribute CS4, you can also post your compressed movie file to a web page. If your intended audience has high-speed Internet access, the quality of the picture on a web page can be better than that in an e-mail 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 in the digital video camera. Saving it back to your camera is a good way to back up your movie, using a MiniDV tape. Also, when it goes back to tape, there is no compression so there is no loss in quality.

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 to the TV each time you want to watch a tape. Unfortunately, there are not as many inexpensive MiniDV tape decks as there are VCR and DVD players; otherwise, saving your movie back to the MiniDV tape would make a lot more sense.

Copy it to VHS tape

You can move your film to VHS if you copy the movie back to your camera first. Then, using the same cable you would use to plug the digital video camera into your TV, you plug it instead into a VCR and press play on the camera and record on the VCR. Your movie will be recorded to a VHS tape, which can be seen on any VCR.