

Digital Formats

Digital camcorders differ from analog camcorders in a few very important ways. They record information digitally, as bytes, which means the image can be reproduced without losing any image or audio quality. Digital video can also be downloaded to a computer, where you can edit it or post it on the Web. Another distinction is that digital video has a much better resolution than analog video, typically 500 lines.

MiniDV:

MiniDV camcorders record on compact cassettes, which are fairly expensive and hold about 60 to 90 minutes of footage. The video has an impressive 500 lines of resolution, however, and can be easily transferred to a personal computer. DV camcorders can be extremely lightweight and compact -- many are about the size of a paperback novel. Another interesting feature is the ability to capture still pictures, just as a digital camera does.

Digital8:

Digital8 camcorders (produced by Sony exclusively) are very similar to regular DV camcorders, but they use standard Hi-8mm tapes, which are less expensive. These tapes hold up to 60 minutes of footage, which can be copied without any loss in quality. Just as with DV camcorders, you can connect Digital8 camcorders to your computer to download your movies for editing or Internet use.

Digital8 cameras are generally a bit larger than DV camcorders -- about the size of standard 8mm models.

DVD:

DVD camcorders are still relatively rare, as compared to MiniDV models, but their numbers are growing steadily. Instead of recording magnetic signals on tape, these camcorders burn video information directly onto small discs. The main advantage of this format is that each recording session is recorded as an individual track, just like the individual songs on a CD. Instead of rewinding and fast-forwarding through tape, you can jump immediately to each section of video. Other than that, DVD camcorders are pretty close to MiniDV models in performance. The picture is a little better on DVD models, however, and DVDs can store more footage. Depending on the camcorder's settings, a disc can hold 30 minutes to two hours of video.

<http://electronics.howstuffworks.com/camcorder4.htm>

Curriculum Benefits:

Students today live in a multimedia world and appreciate variety in their learning environment. They take audio visual information and the Internet for granted! When learning they find a mixture of text, still images, sound and video is more interesting than 'chalk and talk'. They gain opportunities for higher level thinking when producing their own digital video clips. Now that it is easier to produce digital media there are huge opportunities for learning within a school and for global collaboration between students and teachers via the Internet. Even small video clips can be very powerful.

Teachers and lecturers have found even short digital video segments very useful. Students find video motivational and enjoy greater control over their own learning (it is easy to start, stop or replay video segments). With greater bandwidth a quality store of validated digital educational resources can provide teachers and students with significant additional learning resources. This is helpful for teachers concerned about the work necessary to provide students with more customized learning.

DIGITAL VIDEO IN EDUCATION

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Basic Video Camera Shooting Tips and Tricks

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Basic Video Camera Shooting Tips and Tricks



Avoid Zooming In and Out Too Much

As long as there is a variety in your shots there is not much need for camera movement. Shooting various close ups, wide shots and an occasional shot that involves movement should be sufficient for your needs. It's very easy to use the zoom because it is there. Leave the dramatic zooms for Spielberg.

Steady Does It

"Keep it steady" **Always** use a tripod if you have one available. The slightest movement of your body can make a shot unusable. Go easy on the caffeine before a day of shooting. Since every shot that is not taken while using a tripod should be relatively short in length, try exhaling before pushing the record button. Who knew yoga would come in handy!



Setting up a shot

Where are you? Take a couple of wide shots to establish your surroundings. If you are in a classroom make sure this is represented. I recommend taking a variety of wide shots. They really are valuable and when you are editing they can have many uses.

Are you in focus?

Well are you? If you are using a professional Video Camcorder you can change the focus from an automatic focus to a manual one. This is fine but it must be monitored. If you use the manual focus, first zoom in close, like on an eye to check your focus, then when you zoom out it should remain in focus. Camera operators at TV stations check the focus of their news anchors often during commercial breaks

Keep your shots relatively short and with much variety

If you are not the person who will eventually edit this video, it is hard to predict what that editor may need for this video. Shoot with lot's of variety!

- **Wide shots** are important to establishing setting.
- **Close up's** are important for a better view of products and movement.
- **Medium shots** are helpful to add variety to the scene.

Try to shoot all types. With this said, please make sure you have "padding" on each end of the shot. Let the camera roll for a good 10 seconds before action and a good 10 seconds after the shot is over. This gives an editor video room for dissolves and wipes. Always count your subject in. This will help them prepare for the shot.

Lighting, Lighting, Lighting

It's amazing but if your lighting is strong many shots **will look better**. This does not mean that you should over saturate your subject in light, but well lit shots always look more professional. This is an easy trick to make your video look better. Dark shots never compress well either.

Change Your Perspective

Don't limit your shots to one angle only. Approach your subject from all angles. This goes along with the whole, make sure you have variety in your shots, argument.

