Technology Corner 31
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Digital camcorders that allow you to take home "movies" have improved dramatically with much lower prices in the last few years. High quality camcorders are now available for about $150. This column gives pointers on buying a camcorder, taking video, editing the video, and writing the edited video to tape or DVD. The software that we use for this discussion is Microsoft Movie Maker. It comes free with XP and Vista. It is designed for the amateur and is easy to use. The controls are well-labeled and there are several tutorials included on how to use it. However, it lacks the advanced features of a video editing package such as Pinnacle Studio, which is top rated in product reviews and which is my favorite. Movie Maker can write edited video to DV tape and CDs. Pinnacle can also generate DVDs.

In order to take and create videos, you need: 1)a camcorder, 2)a cable to transfer the video from the camcorder to the computer, and 3)a computer with video editing software

The Video Camcorder
Video cameras, called camcorders, are amazing examples of modern technology. They have a number of characteristics that are important. Most have zoom capability, which is very useful. Some also have anti-shake capability and backlight compensation. Some also take still digital pictures, so on vacations you do not need to take two cameras.

One of the important characteristics is the media that is used. Most current camcorders use Mini DV tape, which comes in two lengths: 60 and 90 minutes. I recommend the 60 minute tape as it is much more robust. Newer camcorders can use a small DVD disk for recording, a hard disk, or a media card as in a digital still camera. Whereas the tape can be reused, the DVD disk is write-once.

Another important characteristic is the type of interface to the computer. There are two types: Firewire (also known as IEEE 1394), and on newer camcorders USB 2.0. The interface on the camcorder needs to match the interface on the computer. All new computers have USB 2.0. Older computers have USB 1.1 and may have Firewire. If your computer does not have the interface that you need, you can buy an add-in board for about $30.

Taking the Initial Video
The first step in getting good video is to take care with the original shots. Most of the rules for taking good pictures in the Digital Photography section also apply to video. Some additional suggestions for video are:

- Use zoom very sparingly. It is usually better to zoom between shots than during a shot
- Keep shots short (10-15 seconds) and change orientation and viewpoint between shots
- Mix distant (to set the scene) and closeup (to give details) shots
- Try to get good audio: it is more difficult than the video
- Hold the camera steady. Use a tripod if necessary
- Get close!!!

Transferring the Video to the Computer
Connect the camcorder to the computer with the cable. Position the tape at the start of the desired video. I always plug the camcorder into its power pack to make sure it does not run out of power during the transfer. Start the Movie Maker software by selecting: Start>All Programs>Accessories >Movie Maker. Then select the "Capture Video" menu selection, and then select "Capture from Video Device". Click on the "Start Capture" button. You will be asked to assign a name to the video that is captured. You can capture the video as a single segment, or you can automatically break it into clips each time the camcorder was stopped. I recommend capturing it as a single segment and breaking it up during editing.

Next month: editing and creating the output.