Basic Video Studio Set-Up

Software: Adobe Visual Communicator 3.0

Required Basic Setup
(Click on items for more details)

Computer	$500 and up
VC3 Software	$169 edu retail
Camcorder	$249
Wired Microphone	$30
Basic Green Screen	$45 (optional)
Tripod	$25
Firewire Cable	$12

System requirements

Windows

- Microsoft® Windows® XP Professional or Home Edition with Service Pack 2 or Windows Vista™
- 933MHz Intel® Pentium® 4, Intel Celeron® 2, AMD® Athlon®, or Athlon XP processor or equivalent
- 256MB of RAM
- DVD-ROM drive for installation
- 2.3GB of available hard-disk space for installation

- Standard PC audio card with microphone
- 16MB AGP graphics card with 3D acceleration
- Webcam users: Standard DirectShow-compatible Windows driver
- OHCI-compatible IEEE 1394 video interface card for DV, or analog capture card for use with analog camcorders and VCRs
- Dual-head video card required for full-screen output

Live streaming only

- 2.4GHz Intel Pentium 4 processor
- NVIDIA GeForce or ATI Radeon-based AGP video card

Camera

Digital MiniDV Video Camcorders

Purpose:
Feeds both live video and microphone audio into your computer via firewire cable. Keep in mind you won't be recording footage directly onto this camcorder, it only serves as a live feed into your computer. VC3 supports up to 3 firewire camcorders, however each camera needs to be connected to its own **separate firewire card** to function correctly. Connecting multiple cameras to the same firewire card may create bandwidth sharing issues (stuttering video).

Required Features:
-MiniDV format with firewire output for live feed into your PC.
-Microphone Input Jack (a.k.a. External Mic Jack)

Optional Features:
-Manual focus ring
-3CCD models give sharper color results, but more expensive

What To Avoid:
Camcorders that record to MiniDVD, Hard Drive, or Flash Media. These will NOT have firewire, but likely USB2 for transferring recorded data instead of live video and audio. Connecting via USB is not compatible for Visual Communicator use. Also *avoid Windows Vista 64-bit edition*. Although Windows Vista 32-bit is compatible, I still prefer Windows XP over Vista whenever possible.

Recommended Camcorder:
The **Canon ZR900** is the most affordable firewire camera I've found that does have a mic input jack. Use the links below to learn more about the Canon ZR900.

Green Screens (optional)
Options:
-Seamed or seamless cloth sheet, attached to wall or optionally hung on backdrop pole & tripod stands set
-Portable, collapsible popup green/blue screen
-Painted wall
-Posterboard/paper (tape seams on backside)

Required:
-Flat matte surface (not shiny or reflective)

Price Range:
-Cloth Seamless Sheet $30-300 depending on size
-Backdrop pole and tripod stands set $250-500
-Portable popup $60-200 depending on size
-Paint $20-40/gallon

Recommendations:
-For portability, Popup green/blue screen
-For permanent studios, painted wall with Sherwin Williams "Straightforward Green"
-For Seamless green screen cloth, at least 8' wide (for wider shots)

Recommended Vendor:
EOS Lighting
http://www.eoslightingllc.com/

Computers
Desktops or Laptops
See Adobe VC3 minimum system requirements HERE

Required Features:
-Windows XP or Vista 32-bit Operating System **(NOT Vista 64-bit)**
-A firewire port for connecting your camcorder, OR empty PCI slots for adding PCI firewire cards (one firewire card needed per camera).
-Video card capable of TV-output (known as "dual head"). This may be an s-video or composite video out jack (see picture at right).

Optional Features:
-Second internal hard drive (to store your projects)

What To Avoid:
-Computers that use onboard video, known as "shared video RAM" instead of a third-party video card (AGP or PCIe cards). **ATI Radeon** or **NVidia GeForce** based cards are highly suggested. Some users had issues using video cards like NVidia's Quadro series cards, as these OpenGL cards are more intended for graphic/drafting programs like AutoCad.

Microphones

Purpose:
While it is possible to simply use the camcorder's built-in mic, I still suggest using a lavalier (clip on) microphone like the basic inexpensive model recommended below to best capture the speaking voices of your on-camera talent. Handheld mics are an acceptable alternative, but students need to take extra precautions to ensure the distance between the mic and their mouth remains consistent. Typically for younger students the lavalier mics work best as they remain clipped on clothing keeping the levels consistent.

Wired vs. Wireless:
When budgets permit, I strongly prefer wireless mics, especially in a school setting. Prices have dropped making it more affordable for schools to own wireless microphone equipment (see recommendations below). UHF is a better frequency than VHF, but will cost a bit more. Portable camera-mount wireless mic systems will have a small battery operated receiver that is attached directly onto the camera. However, for a dedicated studio setup where portability isn't necessary, a deskmount/rackmount receiver is better because it plugs into an electrical outlet, thus no batteries needed in the receiver. No matter

which type you decide, the transmitter attached to the student will use batteries (AAA, AA, or 9V) so care needs to be taken to avoid dead batteries.

Connecting Microphone:
The preferred method of connecting your microphone is **_directly to the CAMERA itself_**, not the soundcard's mic input. If you connect your mic directly to the soundcard, you may experience a delay or sync issue. If using multiple microphones like we do, use an **audio mixer** and feed the mixers main output into the camera's mic input jack. This method is completely explained in chapter 5 of my Training DVD Volume 1.

What To Avoid:
USB Microphones, as they may not sync well with the camcorder, causing a mismatch of audio and video feeding into the computer.

Price Range:
Wired PC microphones begin around $29
Wireless microphone sets begin at $100