

Multimedia editing station



.... a multimedia station in every school with integrated digital media features to enable content creation, editing and production, recording and duplication. The Report of the Minister's Strategy Group (2008) P. 26

What is a Multimedia editing station?

A multimedia station is a high specification computer which is capable of creating and editing digital media files for various uses within a school environment. In today's media rich society, students are exposed to a wide of different digital media forms. Digital media use within the classroom can prove some useful learning opportunities. Access to a Multimedia editing station will give student and teachers the opportunities to create and edit digital content to enrich their learning and teaching.

Possible Educational Uses

Digital media have enormous potential for impacting on pupil creativity, team building and higher-order thinking skills. They can be used to:

- Create a record of school excursions, field trips, school events or visiting dignitaries
- Create content for classroom use on various topics
- Create a record of content that can be reused in the classroom such as educational clips on subjects such as school safety etc.
- Create and duplicate content in the area in language learning or poetry
- Record and edit interviews with visiting speakers, such as local historians, dignitaries, etc.,
- Compile still images over a long period in order to produce time-lapse movies for analysis
- Create TY or Leaving Cert class video

Technical Considerations

When purchasing a multimedia editing station it is useful to remember that it is a computer which is specified and built to a higher specification than a normal school computer. An ordinary school computer may be adequate for the majority of digital media editing but the performance will generally be slow. An appropriately specified multimedia editing station will have a range of added functionality including a separate Video editing card, firewire connections and a good DVD burner. The following are some of the main points to be considered.

Video Editing card

Some digital media machines should use a dedicated Video Editing card which has its own multimedia processor and video graphics capability. This enables that the vast majority of the video/media editing is done without placing much effort on the main computer processor.

FireWire connection

The formal name for FireWire is IEEE-1394 plug and is now common place on most digital cameras and laptops. A FireWire cable enables a faster transfer of data from one device to another. When you attach a digital camera to a computer using FireWire, and with the right software the computer can download the image or video files at high speed and with perfect digital clarity.

Hard Drive (external Hard Drive)

Recording digital video to the hard drive typically consumes a lot of bandwidth. As a rule of thumb nine or ten minutes of video requires approx' 2 Gigabytes of disk space. The hard drive needs to have a very fast 'spin speed', as data needs to be moved from the hard disk to memory very quickly during editing. It is possible to install two hard drives and this could be a viable option for some schools. A smaller drive (20GB) can be used to hold the operating system and program files, and a larger, high-speed drive (100GB or higher) installed for the video files. It may also be worthwhile to purchase an external hard drive to enable the transfer of raw files from one computer to another.

DVD burning capability

Schools may wish to consider copying content that they have created to individual students such as infant play or language content for oral examinations. For a small number of copies the single disc DVD burner that came with the computer may suit but is possible to get a separate multi DVD burner quite cheaply.

Graphics/sound card

In the absence of a dedicated Video Editing card, it is important that the computers own Graphic/sound card are capable of processing the files. It would be prudent to ensure that a high spec card should be installed. A minimum of a 256GB card would be adequate.

Digital Editing Software

Digital Editing software can be quite expensive but there are usually educational versions available. Usually one or two licenses is sufficient for a school unless if the schools plans to hold classes in the use of this software. The main titles that would be suitable for school would be iMovie09 for the Mac or Pinnacle or Final Cut Pro.

Headphones

Most computers come with either built-in or external speakers. Schools may also consider buying headphones to assist them in managing the editing of sound levels within a classroom or computer room. Headphone splitters can also be purchased to aid collaboration — these enable two sets of headphones to be used per computer.

External microphone

If the school is also planning to redub existing digital media or create podcasts, the purchasing of an external microphone may be a useful purchase. Some more information on microphones can be found in the podcasting Advice Sheet (Refer to Advice Sheet 34).

Specification Considerations

Apple Mac and Microsoft Windows PCs are both capable of editing digital media but the specification below should be considered to provide adequate performance in completing a digital media editing project.

Apple Mac

- OSX.6 Snow Leopard (operating system)
- 2.26GHz Intel Core 2 Duo
- 2GB DDR3 memory
- 250GB hard drive
- 8x double-layer SuperDrive
- NVIDIA GeForce 9400M graphics
- Built-in 7-hour battery

Microsoft Windows

- Windows® 7, Windows Vista® (SP2), Windows XP (SP3)
- Intel® Pentium® or AMD Athlon™ 1.8 GHz (2.4 GHz or higher recommended) –
- Intel Core™ 2 or i7 2.4 GHz required for AVCHD* (2.66 GHz for AVCHD* 1920)
- 1 GB system memory recommended, 2 GB required for AVCHD* DirectX® 9 or 10 compatible graphics card with 64 MB (128 MB or higher recommended) –
- 256 MB required for HD and AVCHD* DirectX 9 or higher compatible sound card
- 3.2 GB of disk space
- DVD-ROM drive to install software

Accessory:

CD burner for creating Video CDs or Super Video CDs (S-VCDs) DVD burner for creating DVD and AVCHD Sound card with surround sound output required for preview of surround sound mixes for a more professional end result.

Purchasing Considerations

Consider the following points when purchasing any computer

- What is the intended use of the computer and will the chosen specification fulfil these aims?
- Is the computer compatible with existing computer equipment and software?
- Is the technical support service satisfactory?
- A minimum 3 year warranty including next business day (NBD) onsite, including full parts and labour is recommended
- Easy access of multiple USB ports
- Operating System licensing options is suitable for your school

Relevant Web Sites

Videoguys System recommendations

<http://bit.ly/videosystemrecommendations>

Good advice on different specs for video editing

Videoguys on basics for video editing

<http://bit.ly/gettingstartedwithdigitalvideo>

Good advice on basics for video editing

Resources on different aspects of video editing

<http://www.aboutvideoediting.com/>

Basic entry page for different aspects of video editing

Note: While the advice sheets aim to act as a guide, the inclusion of any products and company names does not imply approval by the NCTE, nor does the exclusion imply the reverse. The NCTE does not accept responsibility for any opinions, advice or recommendations on external web sites linked to the NCTE site.

This Advice Sheet and other relevant information are available at:

www.ncte.ie/ICTAdviceSupport/AdviceSheets