

1) More than a teaching tool

PowerPoint is Microsoft's presentation software. It may not be the best multimedia software available, but it has two advantages:

- **Its user interface** – because it looks and feels like any other Microsoft product, the learning curve is less steep for anyone who has used any other Microsoft Office application.
- **Its availability** – because it is bundled with many versions of Microsoft Office, many students will already have it pre-installed on their computers at home.

A big advantage for teachers is that PowerPoint slide shows can be created and easily shared between colleagues. They can be edited to suit specific classes and additional multimedia content can be integrated if needed.

Two different types of multimedia content can be produced:

- **Linear** – slide shows where each slide follows on after the other. These can be set to display new information on the screen automatically, or wait until a mouse button is pressed.
- **Non-linear** – kiosk applications can be made where a student can investigate the material in a presentation by following different routes through it via clickable action buttons on the screen

Presentation project ideas

As well as a teaching aid, it can be used in class by students to help them:

- Organise their ideas as bullet points
- Summarise key facts as a presentation
- Create branching stories/simulations where decisions have to be made
- Make revision aids for themselves or other students

2) Camtasia – screen capture software

Very powerful software that allows you to record the contents of the computer screen (or just a part of it), add a soundtrack and edit it. The movie can then be added as a flash file to a website or interactive book. Possible educational uses include:

- Recording a PowerPoint presentation
- A 'walk-through' of a website
- A demonstration of a particular feature of a program
- Students can make their own tutorial videos.

A more limited open source program CamStudio is available. This has many of the basic features of Camtasia, but the files it produces have tended to be far larger than Camtasia's in comparative tests performed by students.

Other time-saving strategies for teachers:

Inspiration

Will produce a wide range of diagrams – including topic webs. The main advantage of a tool of this nature is that as you add extra elements to it, the diagram will resize itself to reflect this. Inspiration will also produce skeletons for websites for you (or your students) to add content to after mapping the site's structure out and outlines to be dropped into PowerPoint to automatically create a presentation.

Outlines from Word documents

You can use the paragraph styles in Word to organise the different levels of heading used in a longer document. This can then be dropped into PowerPoint which will automatically create a presentation whose structure is the same as that of your notes.

OpenOffice

Open Office is a full-featured office applications suite – with better drawing tools than Microsoft Office – that will enable you (or your students) to do everything that is possible with Microsoft Office. Documents and presentations can be exported as PDF (for Adobe Acrobat) or SWF (for flash) formats.

3) Animation tools

A brief introduction to Flash

Flash is a powerful programming environment that allows you to create very sophisticated multimedia for distribution via the Internet or on CD.

The drawing tools within Flash can easily be mastered by students – animation can be added by three different methods:

- **Frame-by-frame:** takes a long time and a great deal of effort, but in some circumstances, there is no simple alternative
- **Tweening:** the computer calculates the positions of objects between start and end frames
- **Actionscript:** a programming language, gives full control of every object on the stage – can be used to simulate physical laws etc....

Templates are available that will enable you (or your students) to add your own educational content to quizzes, puzzles and games.

1) What is a VLE?

A **virtual learning environment** is an extension of the classroom on the internet. It allows teachers to conduct a number of the same types of activity they would normally do face to face with their students without needing to have them physically present - including:

- Distribution of course materials
- Interaction with each other, the teacher and the curriculum
- Assessment, feedback, tracking and reporting student progress

There are a number of reasons why a VLE should be an integral part of an international school's ICT strategy including:

Risk management - in 2003, *all* bona fide international schools in Kuwait closed for several weeks due to a credible terrorist threat. Flooding has caused problems for other schools in Europe and bird flu could cause serious disruption if all schools in a region are mandated to close for an extended period of time in order to minimise the risk of transmission.

International links – although 'free' forum and chat services exist, to give us the control we need in order to safeguard our students, we need to host inter-school collaborative projects within a VLE.

Student resources – unfortunately, some students are absent from classes from time to time, start courses late in the year, lose important documents or just require additional revision material. A VLE can store all the material for a course, releasing them only when needed.

2) Moodle as a file repository

As an open source (no cost) VLE, Moodle has certain specific advantages. It has also been adopted as the VLE of choice for the Open University in the UK and by ECIS.

The majority of international schools using Moodle focus on its ability to act as a store for students to download course materials from home. This is an immediate need for departments in the high school.

3) Forums, wikis and other collaborative tools

The collaborative tools within Moodle allow for a wide range of communication styles – it is expected that our Year 7 students will be introduced to some of them

1) Pros and cons of different communications technologies in school

Bandwidth restrictions affect a great deal of what we can do.

2) Hardware and software needed for podcasting

Recording Hardware

Background noise can be an issue – the quality of microphone you use is also an important factor. To minimise these problems, some educators recommend using a high quality portable dictaphone to capture interviews and record original material for broadcast.

Certainly, a test of your kit before using it in class is important.

Editing Software

Audacity is a free, high quality product. You can record straight into it if you wish. You may have several different tracks which you can manipulate independently.

Each track could be a single item in a longer broadcast, or it could be split further into separate sub tracks with additional spot effects applied to each one.

Always make a copy of the files you are working with. That way, if something goes wrong, you still have the originals to work with. This means, as you may also have multiple takes of different students, a high capacity external storage device is useful.

Uploading

FTP (file transfer protocol) software can be used to upload a podcast to a website

3) Adding a podcast to a website – different strategies and tools – introducing Dreamweaver

Creating a site from scratch has some advantages in terms of control, rather than relying on tools provided by a host. If the host disappears, you lose your work.

HTML – is the page description language used to give instructions to a web browser in order to tell it how your page is to be displayed. Your html files are just plain text documents that could be opened in notepad.

Dreamweaver – with the next version of Office no longer supporting FrontPage, we will be using Dreamweaver with the students in the high school. A less powerful program like N-vue could be used with younger students to create web pages. Although Word and Publisher can create web pages, it is not usually recommended to use them for this purpose if you have a lot of information that needs to be made public.

Blogging tools – content management software can be used to create a weblog and also automate the RSS feeds to tell subscribers to your podcasts that you have just uploaded another. As a simpler route to website design, it has a number of advantages. However, there is a learning curve with most of these tools and it is essential that you always keep good quality, up to date backups.

Whatever route you choose, it is always a good idea to experiment and test thing out before demonstrating anything in class – and always have a backup plan for something to switch to when the Internet is unusable.

1) Common pitfalls to avoid

I have 1001 fonts on my hard disk and I'm going to use every single one of them in this document.

Fitness for purpose – recognising when a different tool would be more appropriate for the job. Some tasks just need pencil and paper – other times you have to decide when would a DTP package be more appropriate than a graphics program or a word-processor.

This is particularly a problem when a student tries too hard to format a document so that it looks fine one way, but when printed out or displayed on another machine it falls apart. Entering data and then formatting it are to different sets of tasks. Students need to be encouraged to remember this.

Another issue to consider: graphics. Students looking to enhance their work often end up culling graphics from a variety of sources that do not work well together. Encourage them to re-work these images to make derivative versions with a common look and feel, so that they match the style of the students' project and demonstrate more than just unattributed copying.

2) Graphics software available in school

Fireworks, the Gimp and PhotoEditor are all available in school. Microsoft's PhotoEditor will do 90% of the simple image processing that students want to do: resize, crop, alter brightness/contrast etc and apply a few filters to change the appearance of a photo.

The Gimp is open source – has as many features as Photoshop, but without the price tag. The learning curve can be a little steep for students.

Fireworks will allow working in layers and a number of other features that make it ideal – particularly for concentrating on graphics for web-design.

3) Creative project ideas

My biggest concern is that students will end up doing half a dozen holiday brochures in different subjects using a DTP package if there is no co-ordination between departments.

There are plenty of possibilities for students to explore. Even if we limit them to three types of publication:

- Poster
- Newsletter
- Brochure

One approach/philosophy that works well is the concept of a webquest.

Webquests are essentially teacher-moderated Internet research projects. You define the scenario they need to think themselves into. You give them a series of starting points for research on the Internet, a description of the type of outcome you expect from them and how their efforts will be judged.

It is up to you to decide how structured the quest will be and how prescriptive your list of outcomes and evaluation rubric are.