

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

**Cambridge ICT Starters
On Track**

Scheme of Work

4290
Multimedia for a Purpose
Stage 1 Module



UNIVERSITY *of* CAMBRIDGE
International Examinations

Introduction

This module builds on work in Next Steps module 'Exploring Multimedia' using multimedia authoring software. The aim is to create an automated presentation for a target audience, incorporating transition and simple animation. In working on this module, students should be encouraged to find or create appropriate resources and to consider appropriate use of transitions and timings. They should consider how well the presentation fits its purpose and the needs of the target audience.

What is Assessed in This Module?

Students will demonstrate how to:

- create a plan for a presentation
- recognise and select appropriate source materials
- incorporate transition and animation
- incorporate timings, audio and 'build' effects
- demonstrate a clear sense of audience and purpose

To Start This Module You Will Need

- software: the most common software package for this module would be Microsoft PowerPoint, although the presentation software in AppleWorks, Black Cat Slide Show, Textease Presenter and Hyperstudio are also suitable
- some of the following if they are available (not essential): Microphone, Scanner, Digital camera, Digital video camera
- a suitable bank of resources from which students can select materials, such as clipart, CD ROMs, curriculum materials
- sample presentations for students to discuss: Who is the presentation intended for? Does it 'work' well? What features are good/bad/distracting?

Underpinning Knowledge

Before commencing this module it is recommended that students

- are confident and competent users of a range of information technologies
- understand that multimedia, such as sounds, video, images can be stored as different file types and used in a presentation

Complements and extends Next Steps Module: 'Exploring Multimedia'

General Principles and Procedures

The following are further suggestions and considerations:

- students will benefit from developing a good process for working, for example:
 - **inspire** (get ideas, use Multimedia, brainstorm)
 - **plan** (storyboard, think about audience and purpose)
 - **gather** (develop files of images, audio, animation)
 - **work methodically** (name and save files in a way that they can be easily retrieved)
 - **collate** (use the Multimedia Authoring software to collate components)
 - **test** (check regularly that audience and purpose are being met, components are meaningful, make sure that all the effects work)
 - **evaluate** (how did it turn out, does it suit its audience – why? – what improvements could be made)
- storyboards are a useful way to help students plan out a presentation and think about what they need

- students will benefit from having design briefs which they find interesting or have good knowledge of, so they can concentrate on the creation of the multimedia presentation rather than on research information for it
- students do not have to create the materials for the multimedia; they can work with prepared resources
- students will benefit from having plenty of time to experiment with effects
- avoiding over-enthusiastic use of effects will make testing easier. Students may need to be encouraged to reduce the number in the final presentation to just those which add something important to the finished work
- good effects will emphasise the points, not draw the audience's attention to the effects themselves
- students will need time to experiment, not only with timings within individual slides, but also on the overall timing given to each slide. They will need to think about how long it might take an adult or a child to read a piece of information or an instruction, before an animation or sound is activated, for example
- remind students of copyright laws when using images from other sources e.g. magazines, newspapers, the Internet etc. and privacy laws if they take another persons image

Scheme of Work

Learning Objectives	Classroom Ideas	Resources	Notes
Session Plan One			
<ul style="list-style-type: none"> • decide what makes a good multimedia presentation • explore a range of multimedia presentations • evaluate multimedia presentations • describe an 'audience' 	<ul style="list-style-type: none"> • group tasks: <ul style="list-style-type: none"> - students form small discussion groups to explore good and bad features of presentations (use the PMI technique, see Notes). - for each presentation students should decide who is the target audience and what features of the multimedia make it particularly suited for its intended audience • class discussion: <ul style="list-style-type: none"> - which multimedia files were best and why? • class task: <ul style="list-style-type: none"> - produce a 'hot list' of 'rules' for a good multimedia presentation - produce 'hot list' of things to consider when making a multimedia presentation suit its audience 	<ul style="list-style-type: none"> • variety of multimedia examples to view e.g. Student Produced PowerPoint Presentations, PowerPoint examples from the web, presentations, CD ROMs, Flash Movies, Talking books. • http://208.183.128.3/ce/ppt6-12.htm • http://atschool.eduweb.co.uk/meldreth/textandinfo/Powerp/soft.htm • http://www.2learn.ca/teachertools/Presentation/presentationtools.html • http://www.bbc.co.uk/history/multimedia_zone/index.shtml 	<ul style="list-style-type: none"> • a PMI is a way of organising and evaluating information. PMI stands for plus, minus, and interesting. Students can quickly draw up a table headed plus, minus, and interesting • Ref: Edward de Bono (http://www.edwdebono.com/) • teachers will need to ensure that all the necessary plug-ins have been installed on computers to allow for the full range of media to be viewed • viewing a wide range (in many formats) will help students to be creative when they come to design their own multimedia presentations • students will benefit from seeing both good and bad presentations for a range of target audiences

Learning Objectives	Classroom Ideas	Resources	Notes
Session Plan Two			
<ul style="list-style-type: none"> • create a storyboard/plan for a multimedia presentation • Select appropriate resources 	<ul style="list-style-type: none"> • Student Tasks: <ul style="list-style-type: none"> - select a design brief - use the hot list from the previous session which explains what to consider about your target audience, to identify what your audience needs might be. Make some notes about what choices it will imply in your multimedia presentation - organise information into a Sequence or Key Points - devise a plan for your presentation using no more than 5 slides and sketch it out on the storyboard grid. Try to keep in mind: 'What is the desired purpose of the multimedia presentation?' e.g. to educate, inform, amuse, demonstrate - select resources (text, images, multimedia files) to include in the presentation and mark where these will appear on your plan 	<ul style="list-style-type: none"> • storyboard grid or planning template • design briefs suitable for simple multimedia presentations plus a selection of resources (text, images, multimedia for use in whatever design briefs are offered) e.g. <ul style="list-style-type: none"> - a short story for young children - a recipe for a teenager - life cycle – information for a school project - instructions to make something for someone - directions for going somewhere - instructions for doing something - facts about an object/person • examples of appropriate and inappropriate use of images (clipart, digital photos etc) • digital camera and scanner (optional) 	<ul style="list-style-type: none"> • "In multimedia, there are five ways to format and deliver your message. You can write it, illustrate it, wiggle it, hear it, and interact with it." -- D.E. Wolfram (ref: http://www.cs.sfu.ca/CourseCentral/365/li/material/notes/Chap2/Chap2.html) • students will understand better what to do to suit the needs of an audience if this is clearly defined in the design brief • leaving design briefs open ended may appear to give students more freedom for creativity but will often prevent them being clear about what to produce • students can be provided with resources - there is no requirement for them to produce these themselves • students will benefit from seeing an example storyboard

Learning Objectives	Classroom Ideas	Resources	Notes
Session Plan Three			
<ul style="list-style-type: none"> • use multimedia authoring software • create a basic arrangement of slides and information • insert multimedia files 	<ul style="list-style-type: none"> • allow students time to freely explore the multimedia authoring software • teacher demonstration: How to use the software to create new slides, enter text and how to insert multimedia files • student task: students use their storyboard/plan to create appropriate slides and insert selected resources, modifying the plan if necessary 	<ul style="list-style-type: none"> • multimedia authoring software e.g. Hyperstudio, KidPix, Microsoft PowerPoint • students own storyboard/plan and resources from previous session • multimedia files: images, sounds, animations or videos from CD ROM's, the Internet or other sources 	<ul style="list-style-type: none"> • students will benefit by creating the basic arrangement of slides; adding resources and text and modifying this to a level of usability <i>before</i> considering adding effects and other interactive elements. (this will be done in the next session)

Learning Objectives	Classroom Ideas	Resources	Notes
Session Plan Four			
<ul style="list-style-type: none"> • add effects • add slide transition • add sound • add buttons or links • add timings 	<ul style="list-style-type: none"> • class discussions: <ul style="list-style-type: none"> - why can text animation enhance multimedia presentation? - how much is enough. When is sound useful? - when is timing useful? - how can you make a presentation interactive? - why use a transition effect? • teacher demonstration: how to use/add effects, timings, transitions and add sound • student task: students use multimedia software to add effects, timings, button, sound and transition to their presentations 	<ul style="list-style-type: none"> • students own presentations from previous session • example presentations with effects added • a variety of sound file resources • microphone, computer sound recording equipment (optional) 	<ul style="list-style-type: none"> • moderation is the key when adding special effects to a presentation • the effects should emphasise the points, not draw the audience's attention to the effects themselves • students could create simple sound bites for themselves to add an extra interest to their presentations • the options to make sound play automatically in PowerPoint can be confusing and will depend as well on the format of the sound file being used. Students may need help with this initially

Learning Objectives	Classroom Ideas	Resources	Notes
Session Plan Five			
<ul style="list-style-type: none"> • devise a testing 'Check List' • check for errors • user test a multimedia presentation • modify a multimedia presentation to correct errors 	<ul style="list-style-type: none"> • class task: creating a check list. Discuss what needs to be checked and create a check list for students to use when testing and checking. It could include things like: <ul style="list-style-type: none"> - check spelling and grammar - check for errors, wrong fonts, colours, mistakes - check links, buttons - check multimedia files all play correctly - check animations/effects - check timings/transitions • it could also include a range of less factual checks to make such as: <ul style="list-style-type: none"> - does the content say what I want it to? - do the ideas, images, and effects used fit together? - do the ideas, images, and effects used contribute to meaning? • students test and modify their presentations 	<ul style="list-style-type: none"> • students own multimedia presentations 	<ul style="list-style-type: none"> • students should be encouraged to be methodical about checking – using a checklist will help them develop good routines

Learning Objectives	Classroom Ideas	Resources	Notes
Session Plan Six			
<ul style="list-style-type: none"> • devise and evaluation method • modify a presentation • write an evaluation for a presentation • practise skills by creating new multimedia presentations 	<ul style="list-style-type: none"> • class discussion/task: devise an evaluation sheet to use with multimedia presentations. This should have space for writing comments next to the evaluation criteria. It could include things like: <ul style="list-style-type: none"> - what was the target audience - does it suit its audience? - what was the purpose – did it suit its purpose? - what works well/what doesn't work? - best feature/worst feature - suggested improvements • student task: students move around the room completing an evaluation sheet for each multimedia presentation they view 	<ul style="list-style-type: none"> • students completed multimedia presentations from previous session • range of design briefs for further practise 	<ul style="list-style-type: none"> • during evaluations and feedback it is important that students see this as a positive process by allowing time for discussion and/or modifications to be made • writing down simple evaluation statements about the work of others will help students do the same for their own work • encourage students to make positive comments as well as negative • allowing time for discussions at end of sessions will allow students to reflect on new things learned and an opportunity to clarify areas of difficulty

Learning Objectives	Classroom Ideas	Resources	Notes
Session Plan Six Continued			
	<ul style="list-style-type: none"> • class feedback – students see/hear evaluations relating to their multimedia presentations. • student tasks: <ul style="list-style-type: none"> - make any modifications to multimedia presentations as a result of feedback - write an evaluation about your presentation- explaining what about it makes it suitable for its purpose, and mention any modifications you made to make it work, look or suit its purpose better • students practise by: creating other presentations using the same process of plan, develop, test and evaluate 		<ul style="list-style-type: none"> • avoid students giving marks, percentages or ticks as a means of evaluation • students will benefit from practising with a range of design briefs – they will learn from each other and from the ‘trying out’ of new ideas • encourage students to follow a methodical approach with each presentation they create • encouraging students to write about the needs of the design brief and then later how they addressed them will help them develop good analysis/evaluation skills

Assessment Ideas

To show how the Assessment idea fully incorporates the Learning Objectives tested, the Assessment Idea is cross-referenced with the Learning Objective table below.

Assessment Idea

Use a selection of the resources provided to create a short multimedia presentation on the topic: 'Be safe in the Science Lab' which would be suitable for viewing by school children using the science labs. Create a storyboard or plan, (1) identifying which resources you will use on which slides. (2) Create the multimedia presentation adding in the resources you planned to use. (3) Add effects, timing and transitions to your slides to suit its purpose. (4) Test and modify your presentation. Print out your presentation and write a short explanation of any effects used on each slide. (4) Write a few sentences to explain why your choice of resources, effects and structure of your presentation makes it suitable for its purpose of informing students about safety in the science laboratory. (5)

Stage 1 Module – Multimedia for a Purpose	
1	Create a plan for a presentation
2	Recognise and select appropriate source materials
3	Incorporate transition and animation
4	Incorporate timings, audio and 'build' effects
5	Demonstrate a clear sense of audience and purpose

Teachers should retain the following evidence for moderation:

- copy of original assessment task
- students plan
- students printout of final presentation with script for each slide to explain effects
- students written description of how the presentation has been made to suit its audience

Resources

PowerPoint in the Classroom - Includes student friendly tutorials for creating slides, adding images, charts, motion, sound, and timing.

<http://www.actden.com/pp/>

Student Produced PowerPoint Presentations – presentations may be viewed on the web or are zipped files. All viewers are available to download enabling you and your students to view the presentations.

<http://208.183.128.3/ce/ppt6-12.htm>

Planning Process - site which has a planning process to follow

<http://www.tedi.uq.edu.au/mag/>

Presentation Tools – Part of 2Learn.ca which collates a number of sites showing how Information and Communication Technology tools can be integrated into learning.

<http://www.2learn.ca/teachertools/teachertools.html>

Scoring Power Points - by Jamie McKenzie -"Multimedia presentations may be compelling and persuasive. Or they may be glib and disappointing. In the worst case, students will devote more attention to special effects than they will spend on the issues being studied. Powerpointing can become a goal in itself - an unfortunate example of technology being done for technology's own sake. In the best case, the presentation enhances and communicates a larger and deeper body of work and thought"...(site intro)

<http://www.fno.org/sept00/powerpoints.html>

Pick-a-Path Stories in PowerPoint - involves students planning and creating a pick-a-path story using PowerPoint software. Hyperlinks are used to link pages of the story together and enable reader interaction. Students use KidPix or Paint to create illustrations. Instructions and a sample story are included.

http://www.tki.org.nz/r/ict/ictpd/pick_a_path_e.php

PowerPoint Brings Plants to Life - explains how an animated slideshow can be created by students to show the change and growth of plants. PowerPoint and Paint software were used to create and animate images.

http://www.tki.org.nz/r/ict/ictpd/powerpoint_plants_e.php

Pics4Learning - a copyright friendly image library for students and teachers, with images to use legally in class projects and reports.

<http://www.pics4learning.com>

Destination Unknown - based on the theme of travel and culminates in students producing PowerPoint presentations about their chosen destinations. Students publish a range of transactional and visual texts, including an itinerary, travel report, menu, display ads and postcard, using a range of learning technologies.

<http://english.unitecology.ac.nz/resources/units/destination/home.html>

Microsoft PowerPoint - features the presentation graphics program PowerPoint. From here the user can access upgrades, see demonstrations, and get tips and tutorials in the use of the program.

<http://www.microsoft.com/office/powerpoint/default.htm>

HyperStudio – using hyperstudio in the classroom, links:

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

<http://www.hyperstudio.com/library/usings.html>

<http://www.hyperstudio.com/downloads/index.html#media>

BBC Multimedia - This site contains resources for topics such as the Middle Ages, the Romans, and World Wars I and II. It features a multimedia zone complete with games and 3D reconstructions as well as animations, audio and video.

http://www.bbc.co.uk/history/multimedia_zone/index.shtml -

KidPix - KidPix software for Apple

<http://www.kidpix.com/edu.html>