

## Introduction

Xerte was developed by Julian Tenney at the University of Nottingham in order to allow content creators a way of making learning objects with a high degree of inherent accessibility. TechDis has been impressed with the vision for Xerte and has worked with Julian to make the Xerte tool more user friendly for non-technical content developers – for example front-line teachers and lecturers. Ron Mitchell from Tower Hamlets College has worked with Julian to create a wizard tool which lets a user create content simply by cutting and pasting text and browsing for media objects.

Xerte provides a quick way for tutors to create learning objects with built in **colour preferences, font size preferences, keyboard navigation** and **text to speech** (when viewed via Internet Explorer only).

## Making your first learning object

Prepare the different elements of your learning object. Xerte accepts :  
Text.

Images in .jpg format. More information and guidance.

Audio in MP3 format. More information and guidance.

Video in .FLV format. More information and guidance.

You will not need to manually assemble these components in the same folder -the wizard will automatically copy them into its own 'Media' folder.

## Getting hold of Xerte:

It is important to remember there are two bits to this software – a simple wizard interface for users with limited technical knowledge and a fully fledged developer tool for the technically confident. This guide will focus ONLY on the simple wizard interface.

Go to the Xerte website – [www.nottingham.ac.uk/xerte](http://www.nottingham.ac.uk/xerte)

From the main Xerte page download and install the Xerte engine (left hand highlight in figure 1).

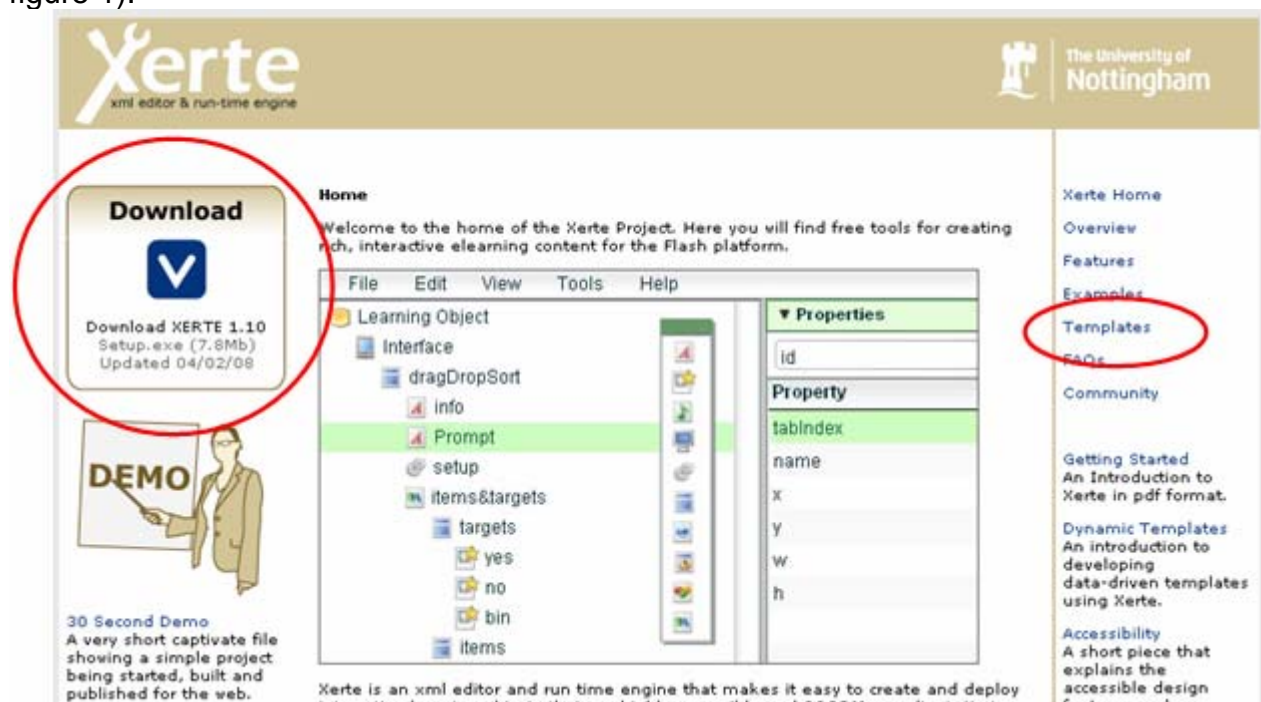


Figure 1 - Screen shot of the Xerte main page.

From the main Xerte page follow the Templates link (right hand highlight in figure 1). The templates page is shown in figure 2 below. Right click over the TechDis.zip link and select 'Save link as..' or 'Save target as..' depending on your browser.



Figure 2 - the Xerte templates page with the link to the wizard highlighted.

Unzip the file using appropriate zip software such as Winzip. You will be left with a file called techDis.xtp.

### ***Making your first Xerte object***

1. Double click on the techDis.xtp file.



Figure 3 - the icon for the techDis.xtp file.

2. When the dialogue box opens, select the folder where you want to create your learning object. This folder should be empty so it is often best to select the Make New Folder option and create a specific folder for your new learning object.

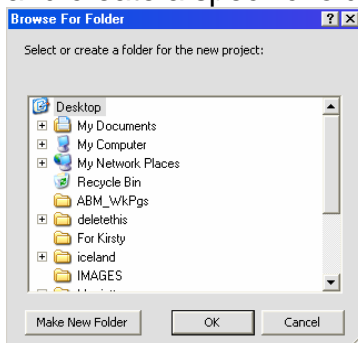


Figure 4 - the browse dialogue lets Xerte know where everything should be collected and saved.

3. Confirm the prompt to open a new project.

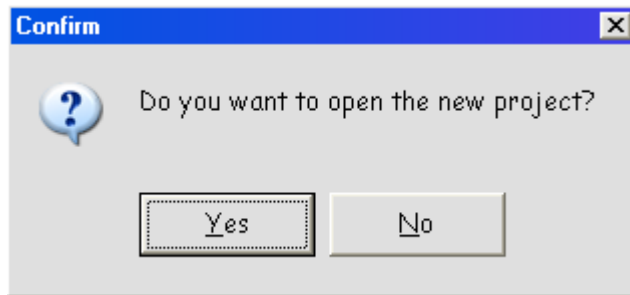


Figure 5 - the 'start new project' prompt.

4. The TechDis wizard opens up as below: the left hand side is the navigation tree where pages you create will be placed – you can easily reorder, copy and delete pages from this area of the wizard. On the right hand side the relevant dialogue boxes will appear. Start by filling in the title of your presentation in the 'Learning object title' dialogue box (see below). This is the overall title that will appear at the top of all subsequent pages. When you have added the title click on the Page icon (left hand side) to start to fill in the first page.

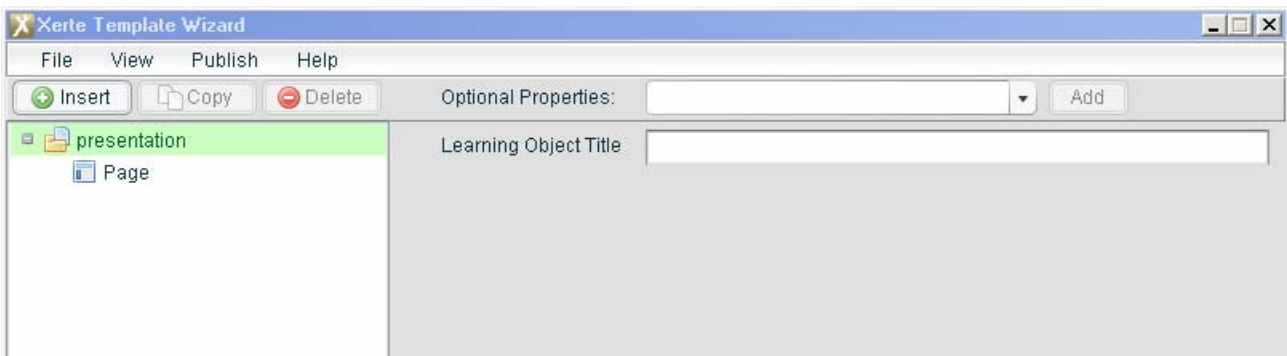


Figure 6 - the title for the whole learning object is added at this point.

Clicking on the page icon gives a range of options on the right. The key ones are at the top and as you move down the list the more advanced ones are found.

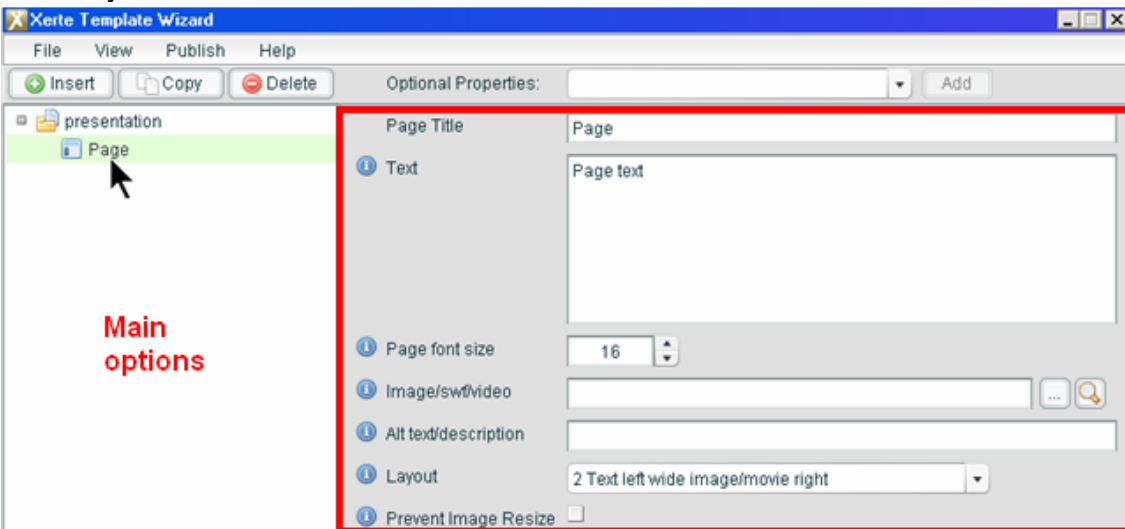


Figure 7 - the main page options.

5. In these options (figure 7 above) the page title can be added along with the relevant text. The default font size can be set and you can browse to add images (jpg or png format) or video (swf or flv format). If you add images or video you need to add an text description to the alt text/description dialogue. This will be available to all learners via a pop up over the image but it will also be picked up by learners accessing the materials through a screenreader.

6. The layout of your page can be changed by selecting the appropriate option from the drop down menu options. To see how it looks click the Play button at the bottom right of the screen (see figure 8 below).

7. Images automatically scale to fit the available space but if your image is small you may not want it to enlarge because this can degrade the image quality. In this case tick the 'Prevent image resize' box.

8. The advanced options (figure 8) allow you to rescale images if you need them to fit the page better. It is also possible to add an MP3 to the page with an accessible sound player – browse to the MP3 file using the Sound dialogue.

9. The dialogue for the second image/swf/video and the accompanying Alt text description is for use with a particular layout – layout 8. This creates two columns with an image or video at the top of each. To get the text to split at the appropriate point the phrase <SPLIT> must be typed into the text at the relevant place. This tells Xerte how to split the text across the two columns (see figure 9).

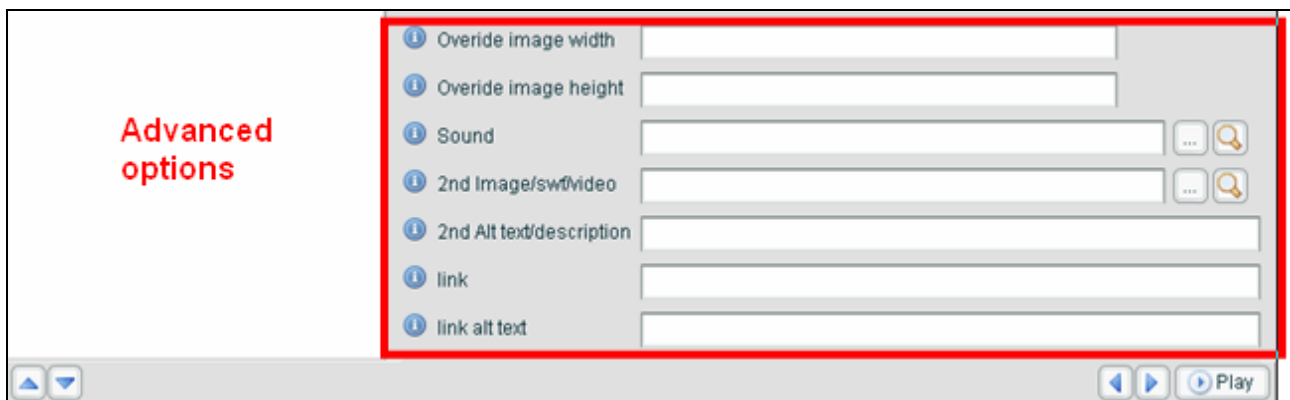


Figure 8 - the advanced options.

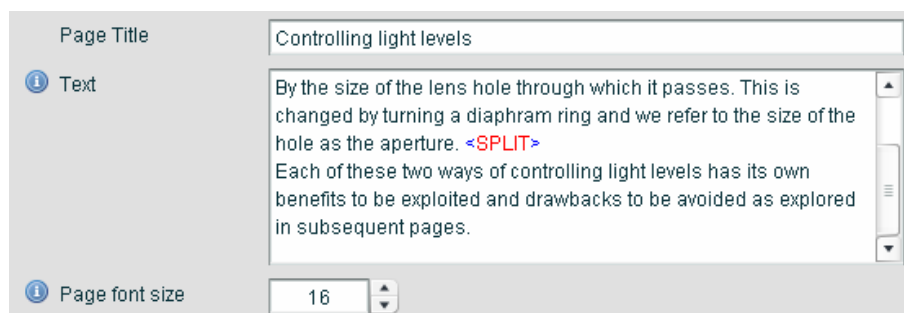


Figure 9 - the <SPLIT> command shows the software at what point to split the text into two columns.

10. Adding a hyperlink to the page. It is possible to add a single hyperlink to the bottom of each page but it is also possible to add hyperlinks in the text pane so a variety of links can be created. To add a link at the bottom of the page fill in the url and the alt text (the text that will show when users hover over the link or screenreaders access it) in the bottom two dialogue boxes – see figure 8.

## Advanced text - bold, bullets, hyperlinks etc

The text pane accepts the text that will appear on the page. You can paste into here. If you want to add rich text elements (bold, italic, hyperlink etc) select the relevant bit of text and right click to select the required options.

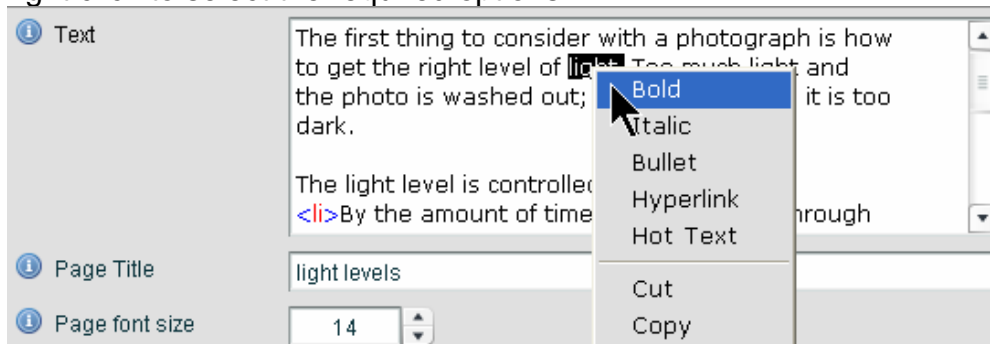



Figure 10 - text can be entered or pasted into the text pane. Rich text elements can be added using the right click menu.

## Previewing the page

When you have filled in the relevant dialogue boxes click the Play button  on the bottom right of the page to preview the finished page.

Please note that the **preview is only partial** – Text to speech and text resize only work when the learning object has been published to a **website**.

## Inserting a new page

To insert a new page click the Insert button on the left hand side and select Page. Eventually we hope to provide other options such as inserting a quiz.

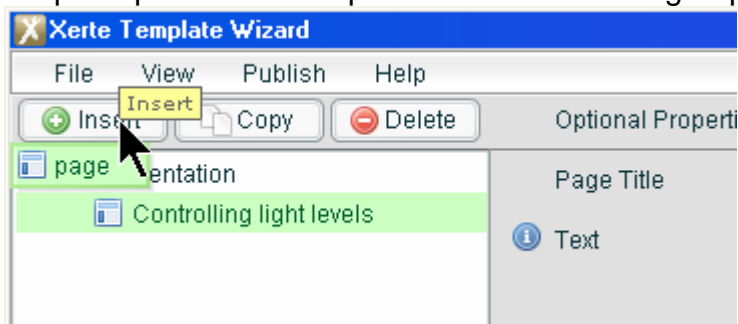


Figure 11 - adding a new page to the presentation

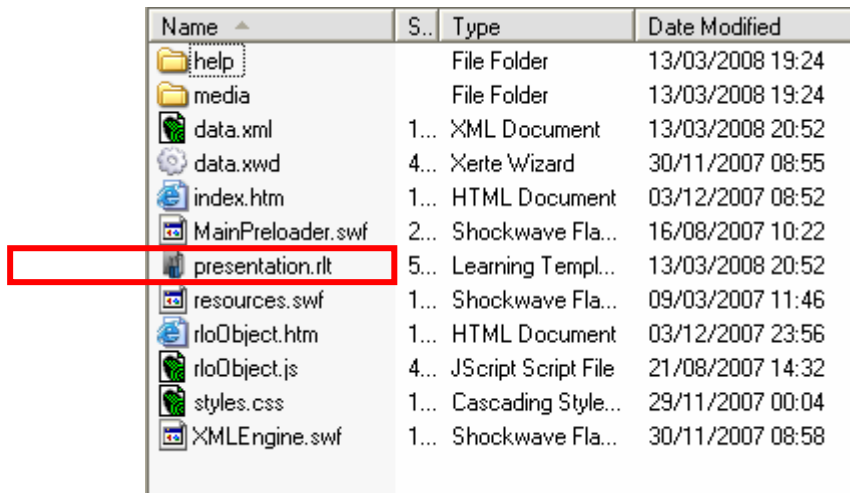
## Ending a session

To end a session, navigate to File > Save and close the wizard window. Close the main Xerte window, responding to the prompts as appropriate.

## ***Editing the learning object at a later stage.***

If the learning object evolves through a number of stages you will want to be able to get back to the editable version without creating a new learning object.

Browse to the file where the learning object is located. Click on the file **presentation.rlt** to reload the wizard and continue as described in the sections above.



**Figure 12 - a learning object can continue to be edited and evolved - double click on the presentation.rlt file.**

## ***Publishing the completed Xerte learning object in a VLE or Intranet***

When you are happy with the completed presentation navigate to either Publish > Publish to create the final web version or Publish > Package to create a zipped file for distribution or for SCORM upload. Unless you are technically switched on the latter is worth avoiding!

Ensure that all files and folders generated for your project are uploaded together. Failure to upload all the files may result in broken links. When you link to the learning object the key file is named index.htm. As long as all the files generated by the publishing process have been uploaded the learning object should work in the browser.

NB. Some of the functionality (for example text to speech) does not work in the Play/Preview mode or in the local browser but only works when viewed through a browser across the Internet. It is possible to change browser security settings so that these functions work in Play/Preview mode as well but that is beyond the scope of this introductory document.

## Appendix 1: Understanding and changing the image format.

Xerte accepts images in both .jpg/.jpeg and .png format. If your image is in another format (eg .gif or .bmp) you will need to convert it. Instructions on how to do this are included below.

### What is the difference between .jpg and .png?

Jpg/Jpeg images are the kind that come off most digital cameras. It is an excellent general format achieving good quality at small file sizes. Png images are normally bigger filesizes for the same quality but they have the added advantage of handling transparency. This is ideal for logos or diagrams since you can set the background colour to be invisible.

### How do I convert from a .gif or .bmp file?

It is easy to convert from gif or bmp to jpg using the free Paint tool in Windows. Paint will not currently convert to png files but other third party software tools such as IrfanView will (<http://www.irfanview.com/>).

In this example the image (litter.gif) is in .gif format but Xerte requires .jpg.

In order to change format using inbuilt Windows software:

Right click over the image and select 'Open with..' then choose Paint (see fig xx).

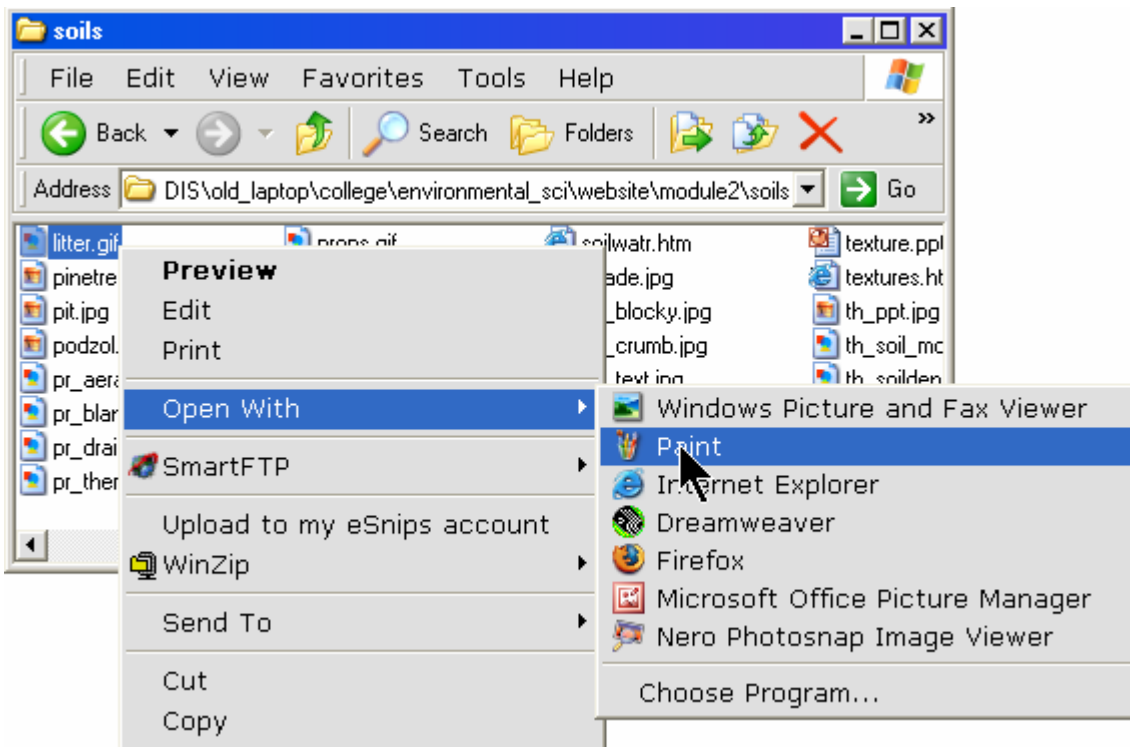


Figure 13 - right click over an image then select **Open With** and choose **Paint** to do a quick filetype conversion.

Select Save as... and change the image type in the 'Save as type:' dialogue box (see fig 12).

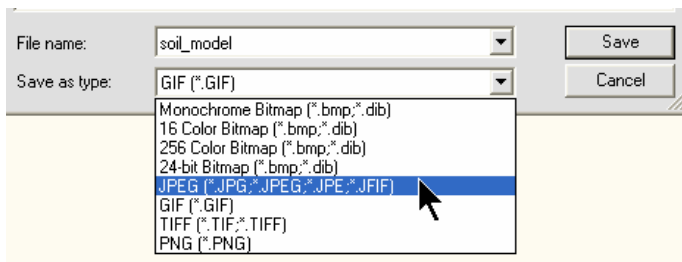


Figure 14 - resaving the Paint image in the jpg format.

## Maximising image accessibility

Images are not perceived in the same way by all learners. Some will have perceptual problems seeing the image; others may have cognitive difficulties in perceiving the key points. To make an image accessible it is important to clarify the points it illustrates. This is usually done by providing a text alternative and the Xerte wizard both allows for this and nags you if you fail to provide one.

## ***Appendix 2: Understanding and changing the audio format.***

### Using audio effectively

Text content in Xerte can be read in several ways – by adjusting browser settings and using the inbuilt Xerte text to speech function or by using third party software such as text to speech engines or screen readers. Consequently you need to consider how the audio files will add value to the learning. If the audio is background music you need to weigh up whether this will be a distractor for someone accessing the text content through a screen reader.

Windows currently has no inbuilt facility for converting audio files, therefore you will need separate software to do this. There are several free applications that will do this, including: Switch (<http://www.nch.com.au/switch>) sound conversion software  
Audacity (<http://audacity.sourceforge.net>)

### Maximising audio accessibility

Where the audio contains essential additional information (for example interviews) it is important users can get hold of either a transcript or a summary. The easiest way of providing this is via a hyperlink to another file.

## ***Appendix 3: Understanding and changing the video format.***

### The Xerte video player

Xerte has been designed with an accessible video player – all the video controls are accessible via the keyboard or a switch. The accessible video player is Flash based so Xerte only accepts video in .flv or .swf format. If you have video in alternative formats (eg .avi; .mpg; etc) you have two options – convert or hyperlink.

For maximum accessibility we recommend converting since the Xerte controller is highly accessible however if this is beyond your technical skills, use the hyperlink facility (right click on text pane text and select hyperlink) to link to the separate video file. This may be less accessible to some users but the presence of video adds accessibility to many others. Windows currently has no inbuilt facility for converting video files, therefore you will need separate software to do this. There are a number of freeware video converters on the web and the ones known to us are linked from the TechDis Community site Xerte course at <http://www.techdis.ac.uk/community/course/view.php?id=86>. Whichever you use, the end format you require is .FLV or .SWF.

## **Maximising video accessibility**

Whilst video is an accessibility benefit for many it can also provide barriers for some. It is important that the key learning objectives of the video are made available to those who may be unable to see or hear the content.

If you are encouraging staff who are unfamiliar with video formats to work with this medium we would recommend starting simply and getting them to hyperlink to whatever output format their camera/recorder gives them in order to get the accessibility benefits of the medium. But we strongly recommend a training trajectory that

- subsequently allows them to convert video to .flv.
- stresses the importance of providing transcripts, subtitles or descriptions of the key learning objectives.