

# **User Guide for the GLO-Maker v1 Authoring tool**

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In this guide we have tried to include everything that we believe you will need, we may have left something out or have not provided the level of detail you were expecting. Your feedback on any aspect of this document (pedagogical/technical, step-by-step instructions) – will help us to improve this guide and better support GLO-Maker users. Please send your feedback to [e.baur@londonmet.ac.uk](mailto:e.baur@londonmet.ac.uk)

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# User Guide for the GLO-Maker Authoring tool

## *Introduction*

This guide is aimed at users who want to create or adapt generative learning objects (GLOs). The guide introduces the basic concept of GLOs. It then shows how to create or adapt learning objects using the GLO-Maker tool.

**What are learning objects?** There are many definitions of learning objects. However, in our approach learning objects are focused on one clear learning goal or objective. They are designed to be a) pedagogically effective, and b) reusable. Our learning objects normally incorporate the use of interactive multimedia to create a rich, effective learning experience. Examples of these rich multimedia learning objects may be found on the Website for the Centre for Excellence in Teaching and Learning in Reusable Learning Objects <http://www.rlo-cetl.ac.uk>

**What are Generative learning objects (GLOs)?** The traditional approach to reuse of learning objects has been to separate content from context in order to make the content reusable. However, it is not content but the quality of the learning design that is most important for effective learning. The generative learning object (GLO) approach thus inverts the traditional approach. It extracts successful pedagogical designs and makes these the basis for reuse. These designs are built into an authoring tool: GLO-Maker. A tutor can then add content to produce learning objects based on successful designs to meet their specific needs and preferences.

**What the GLO-Maker tool does:** the GLO-Maker tool incorporates a set of successful design patterns. These patterns are used to generate specific learning objects. Any one pattern can be used to generate a range of learning objects which may vary widely in content. The GLO-Maker tool aims to make these design patterns as accessible as possible so that a user can generate a new concrete learning object based on the chosen design 'template'. The tool also provides a 'freestyle' option where you can create your own specific leaning object.

**Who is the GLO-Maker aimed at?** Whilst this guide focuses on tutor use, GLO-Maker is also aimed at multimedia developers, learners and staff support officers (for training purposes).

**How do I access and use the design patterns?** This will be explained more fully in the Guide but for a brief introduction please see Figure 1. This shows a screen shot from a learning object being developed based on a design pattern called eMI (evaluating Multiple Interpretations). This pattern was developed in conjunction with the UK National Subject Centre for History, Classics and Archaeology. The panel on the left shows the pedagogical structure of the design. There are three broad tasks: ‘Orient’, ‘Do Task’, and ‘Reflect’. Each of these tasks is refined into more specific functions. For example, ‘Orient’ (introduce the topic) is broken down into more refined functions. These are expressed in the three labels under the Orient task/heading: introduce **What** the learning object is about; **Why** learn and **Preview Outcome** of the learning task.

The panel on the left thus captures the pedagogical choices made by the tutor/designer. These can be read as a sequence which sets out the pedagogical ‘storyline’ of the learning object. This storyline can be read from top to bottom in the left panel.

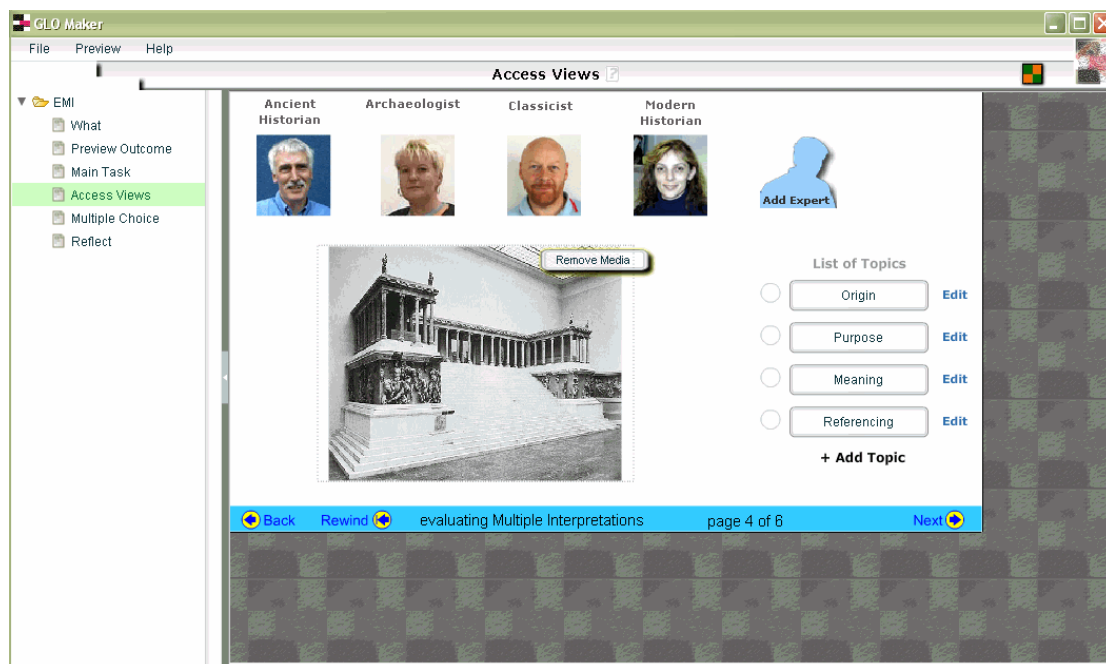


Figure 1: Screen shot from the eMI (evaluating Multiple Interpretations) GLO pattern

Crucially, every step in the storyline has an attached default page layout that enables this function to be expressed in a screen which is accessed by the learner. Thus in Figure 1, the selection highlight on the left panel shows that we are on the **Access Views** screen. This particular step involves experts presenting different interpretations of the common artefact. The screen in Figure 1 is a mock-up based on the requirements of the History Classics and Archaeology Centre. There is a picture

of the artefact in the centre of the screen: this is, in fact, an ancient Greek monument. Pictures of 'experts' are shown along the top of the screen, and the topics they will speak on are shown on the right-hand side of the screen. The screen allows the learner to access any expert on any one of the headings, and to compare the views of different experts.

At any stage the tutor can get a preview of the learner's view by clicking on the 'preview' button on the menu bar at the top of the screen. When the learning object is complete the learner gets access to a rich multimedia page enabling them to compare interpretations of different commentators on a common artefact or theme.

This example is used to give a brief overview of the rich functionality available through the tool, and the direct way in which tutors can access this functionality. A tutorial description of how to create a whole learning object using this pattern is given in section 4 of the guide.

The structure of the guide is as follows:

### **1. Downloading the software**

This section describes how you can download the free software onto your desktop computer.

### **2. Tutorial guide to creating a new learning object**

This section provides the tutorial guide on how to create a full learning object. All the source materials are provided online, so that you can work through the tutorial and create a new learning object in a step-by-step fashion.

### **3. Appendices**

This setup provides a default sequence for reading the Guide. However, the sections can be accessed in any order; *ie.* you can access the sections in whatever order best suits your needs and interests.

## Using the online resources

Before you begin you may wish to go to the GLO Maker website as all the resources you need for the exercises included in this guide can be downloaded from there:

<http://glomaker.co.uk/train.htm> . The resources used from this website are described in the relevant sections.

## Deployment platform issues and recommendations

Below is the treatment of two frequently asked questions (FAQs).

### Can I run GLO Maker on Mac OS machine?

Yes, this is possible with the use of Windows XP virtualization or emulation software. Successful tests have been done with *Boot Camp*, a utility included with Apple Inc.'s Mac OS X v10.5 "Leopard" operating system that assists users in installing Microsoft Windows XP or Windows Vista on Intel-based Macintosh computers. Also, successful trials have been reported with *Parallels Desktop for Mac*, hardware emulation virtualization software.

### I run Windows Vista and have problems previewing my work (GLO)?


This problem stems from the way Vista goes about security and disallows any program without special privileges to access the Program Files folder on your computer. The solution to this is to locate the GLOMaker.exe file in your Program Files (typical path is something like this C: Program Files/GLO Maker/) and right click on the GLOMaker.exe file – and select a menu option, second from the top, *Run as administrator*. If the named option does not appear this may mean that you do not have the sufficient rights on the machine in question and it is best to seek assistance from your administrator.

## Section 1. GLO Maker Software User Guide: Download and Setup Instructions for: Firefox

There is also an animated online tutorial which demonstrates how GLO-Maker can be installed – this can be accessed from: <http://glomaker.co.uk/download.htm>

The following provides download instructions for using the Firefox browser. Please see appendix for download instructions using Internet Explorer.

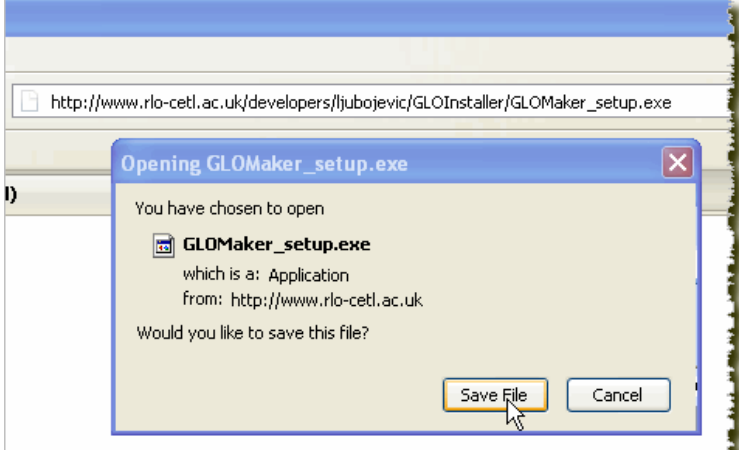

**Note:** if you are using a computer supplied by your institution you need to have administrator rights set on your account. If you do not have these rights you will probably not be able to install the software. In this case, contact your Computer Services Department and request them to download the software for you.



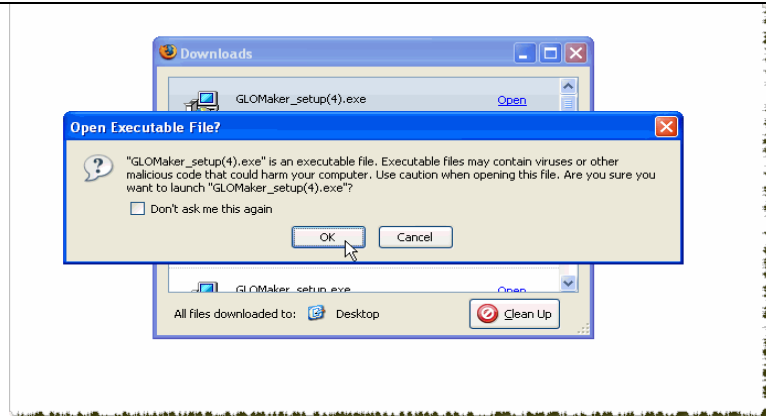
### Using Firefox Browser

Type the following URL into your Firefox browser to install GLO-Maker:  
<http://glomaker.co.uk/download.htm>

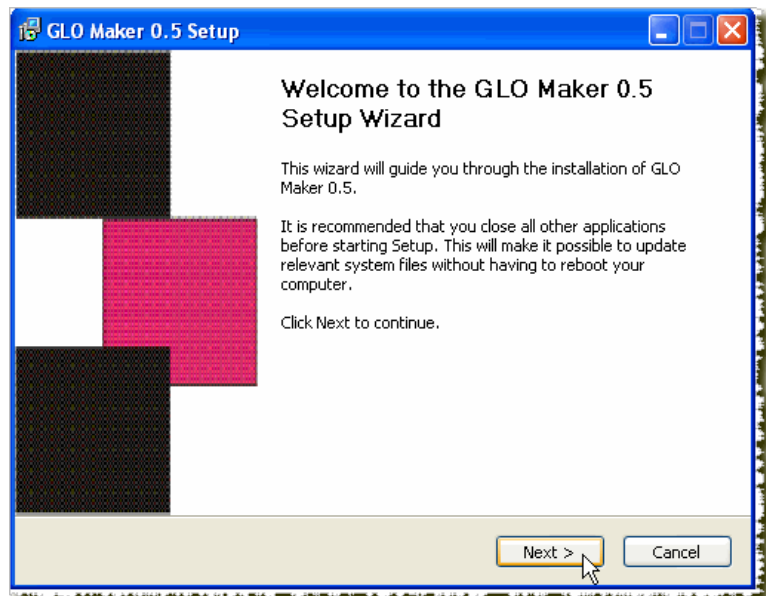
- A window will open up asking whether you would like to save the file
- Click **Save File**
- A '**Downloads**' window will open up
- Click on the **Open** option to accept the download

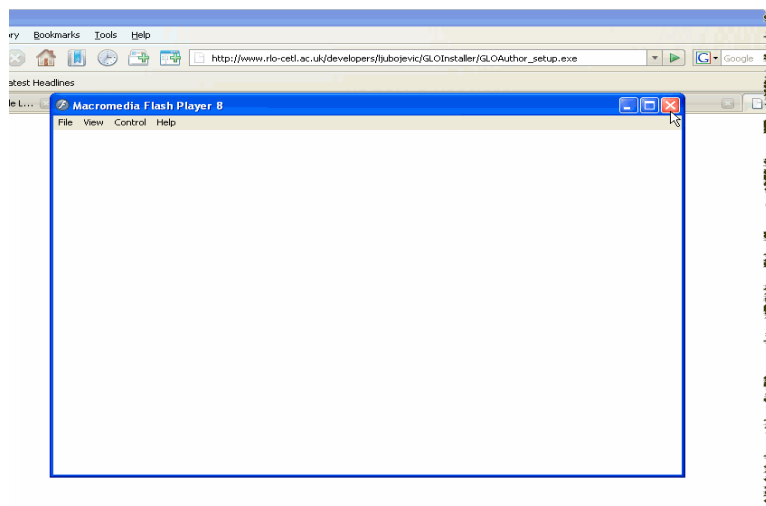
- An automatic warning will display (to check that you wish to download an executable file)
- Click **OK**



- The Setup window will open
- Click **Next** to continue with the Setup and follow the instructions

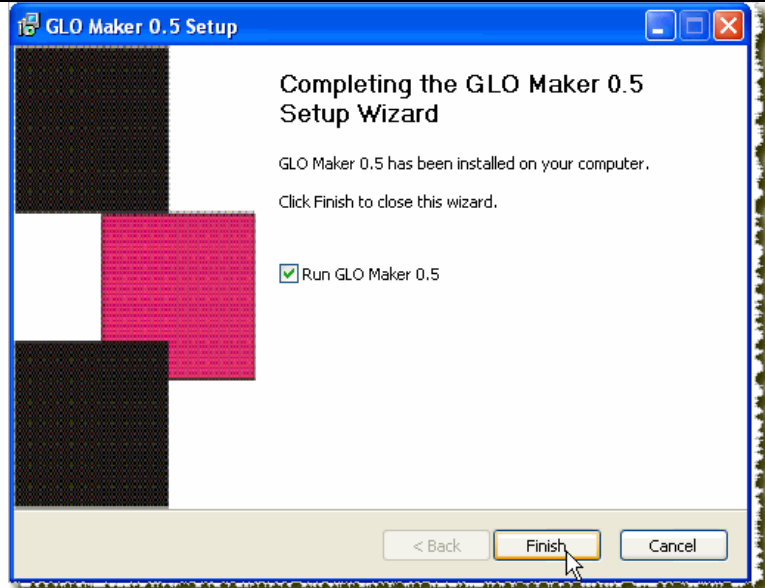


- At the end of the installation process a blank window will open up
- **Close** this window

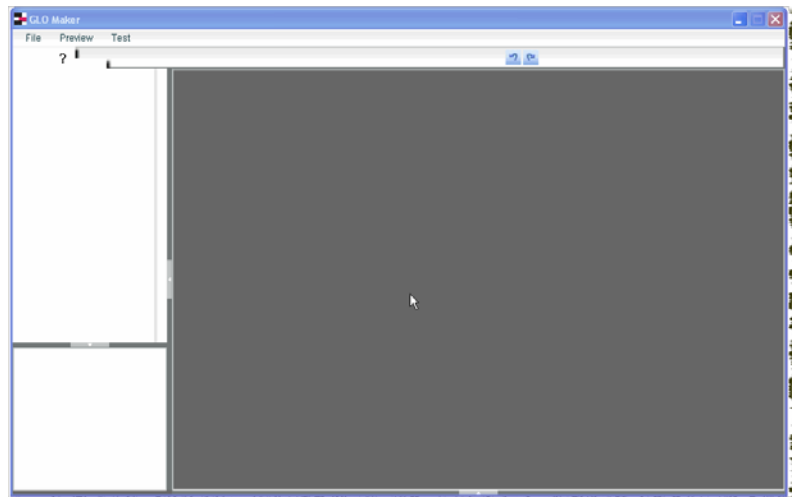


- Click **Finish** from the setup window

*(Notice that the 'Run GLO Maker' is automatically set to run upon completing setup. You can unselect this option if you do not wish to run GLO Maker)*



- GLO Maker will automatically open up ready for use



- You should also see the GLO Maker icon on your desktop



## Section 2. Tutorial guide to creating a new generative learning object

This section provides the tutorial guide on how to create a full learning object. All the source materials are provided online, so that you can work through the tutorial and create a new learning object in a step-by-step fashion.

### ***Using GLO-Maker to create a GLO with the eMI pattern***

Preview the completed GLO from the following URL:

<http://glomaker.co.uk/library/emiPattern/GLOPlayer.swf>

For this activity you will need to use the following materials that are downloadable from the following URL [http://glomaker.co.uk/training/media\\_resources.zip](http://glomaker.co.uk/training/media_resources.zip) . You will need to unzip this file and it is recommended that you unzip the contents into a folder on your desktop as you will use resources from within this folder to create a new GLO (tip: use a meaningful folder name such as ‘My GLO Work’).

The download zip file will contain the following resources:

- media\_resources.zip
  - audio
    - origin\_female\_voice.mp3
    - origin\_male\_voice.mp3
    - purpose\_female\_voice.mp3
    - purpose\_male\_voice.mp3
  - images
    - buildings
    - people
  - transcripts
    - originFemale.txt
    - originMale.txt
    - purposeFemale.txt
    - purposeMale.txt
  - emi\_core\_text.doc

This tutorial will show you how to create a learning object by the most simple and direct route. Section 3 will show you how to have greater flexibility and control over the structure of the learning object. This includes a “Freestyle” option that gives you considerable flexibility in creating a learning object of your choice.

There is also an online video demonstrating how to create and save a new GLO, available at:

[http://glomaker.co.uk/emi\\_without\\_audioV2.1/emi\\_without\\_audioV2.1.html](http://glomaker.co.uk/emi_without_audioV2.1/emi_without_audioV2.1.html)

### Step 1 of 7 Start a New GLO

Open GLO Maker by double clicking the **Icon** found on your desktop.

Click on **Create Screens** from the option window

From the pop up window click on the **‘Choose pattern template’**.

From the dropdown menu, select **eMI: evaluating Multiple Interpretations**

Click **GO!**

This will add the default page layouts for the eMI pattern (these can be altered)



Clicking on the headings in the left panel will display each page. In the next step you will add content to these pages.



*It is useful at this stage to open the 'emi\_core\_text.doc' from the folder downloaded earlier. This document contains text you can copy and paste for the text/narrative areas (alternatively, you can also add your own text). If you are not sure how to copy and paste please watch the online video:- (works best in Firefox)*

[http://glomaker.co.uk/emi\\_without\\_audioV2.1/emi\\_without\\_audioV2.1.html](http://glomaker.co.uk/emi_without_audioV2.1/emi_without_audioV2.1.html)

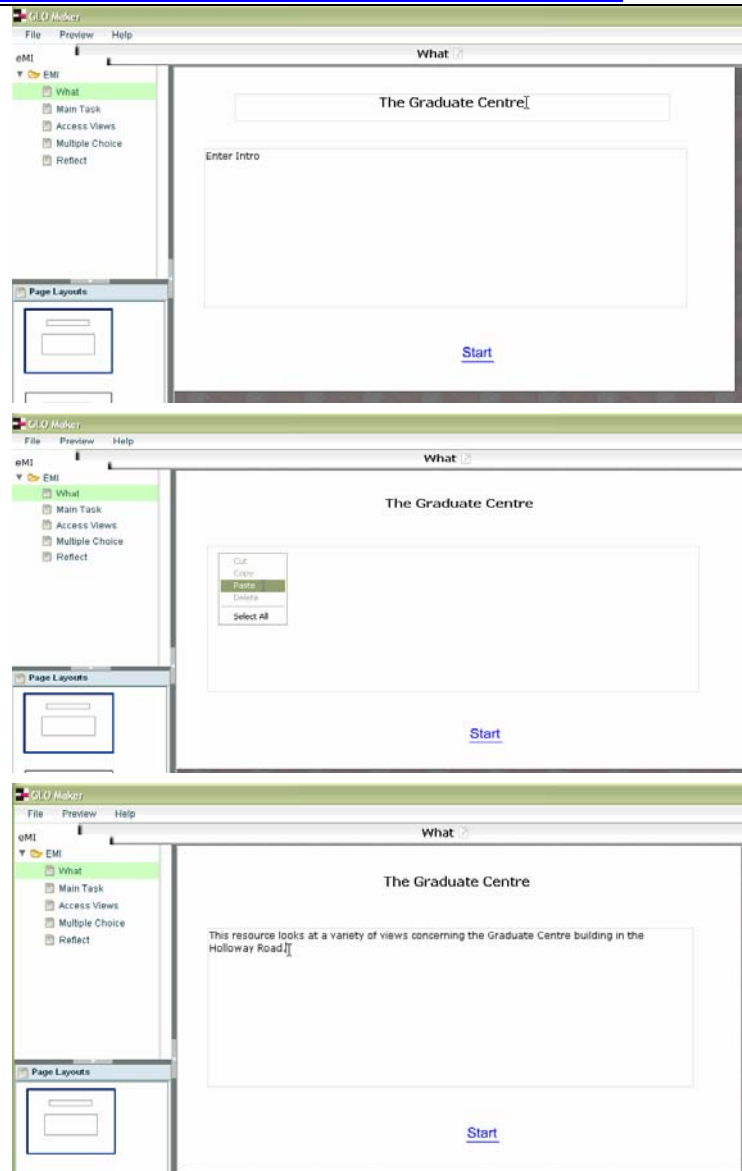
**Step 2 of 7**

From the left panel  
Select **What**

Type (or copy and paste)  
the following into the title  
text box:  
The Graduate Centre

Provide a brief  
introduction in the  
narrative window  
provided.

(Remember you can copy  
and paste text from the  
'emi\_core\_text.doc')



**Step 3 of 7 Saving**

From the main menu select: **File** and then **Save as**

The **'Browse For Folder'** window will open.

Navigate to where you wish to save your work (ie. desktop).

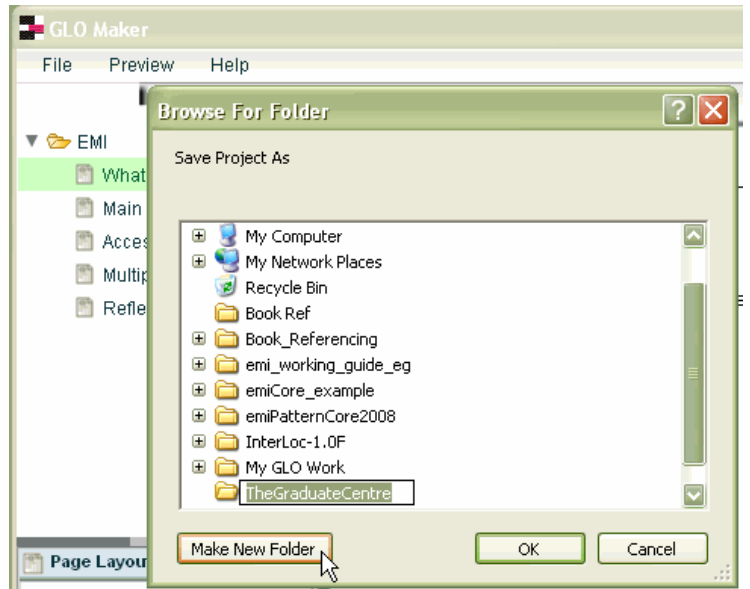
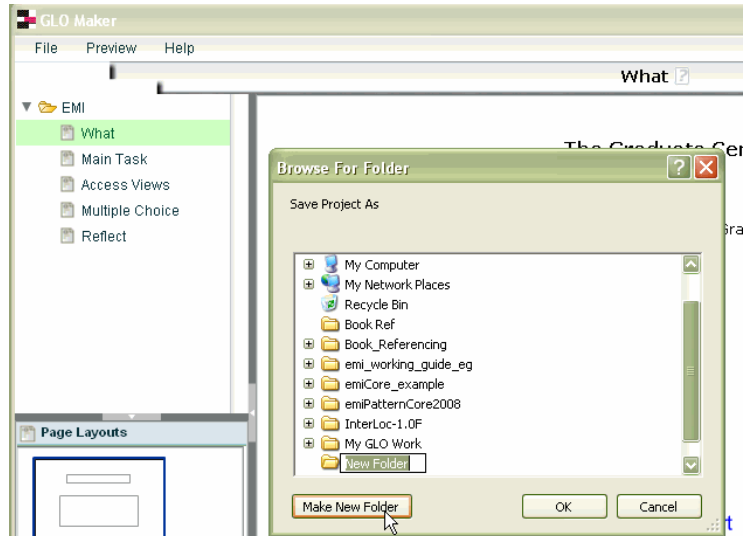
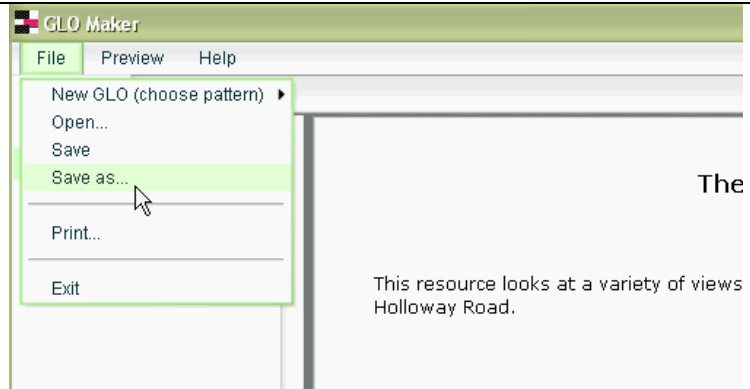
Click on **'Make New Folder'**

Type the name of your new folder (this example uses 'The Graduate Centre')

Click **OK**

Your GLO has now been saved.

To **Open your existing GLO**, please see instructions on page 24 (Opening existing GLO)



**Step 4 of 7**

Click on **'Main Task'** in the left panel

Copy and paste text for Set Task

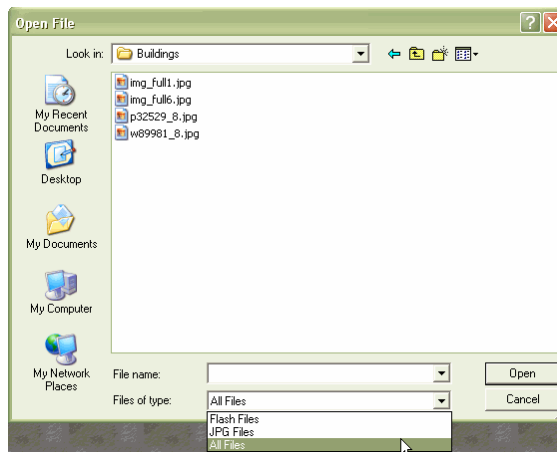
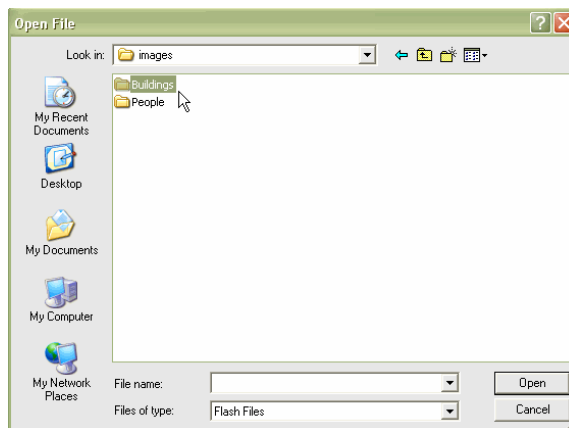
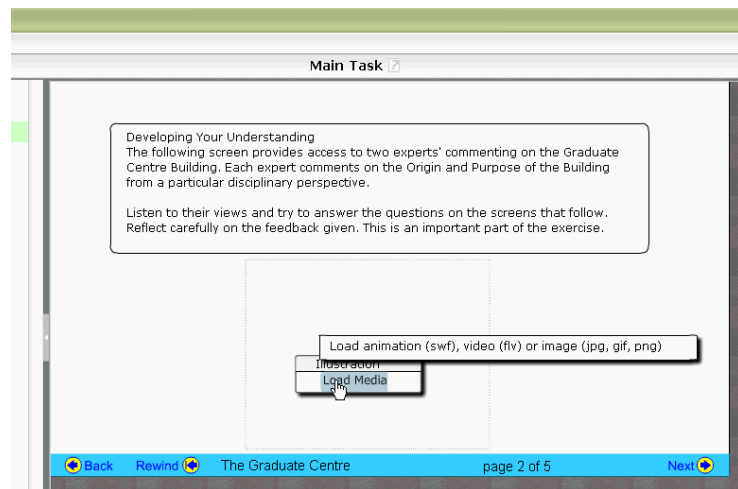
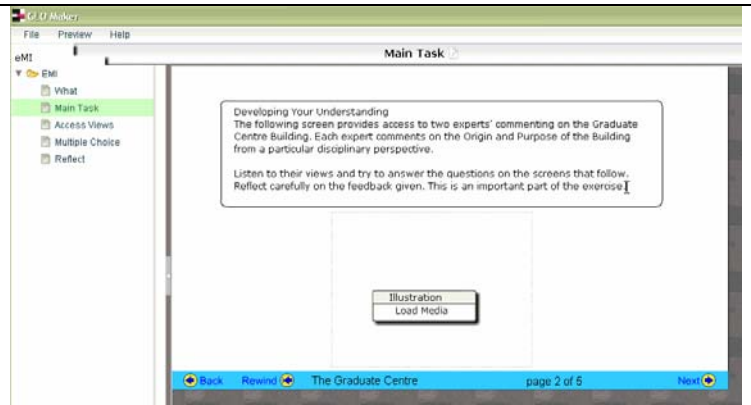
Click on 'Load' from the Illustration button to add an image

From the media\_resources folder select the **images** folder

Once inside the images folder select the **Buildings** folder

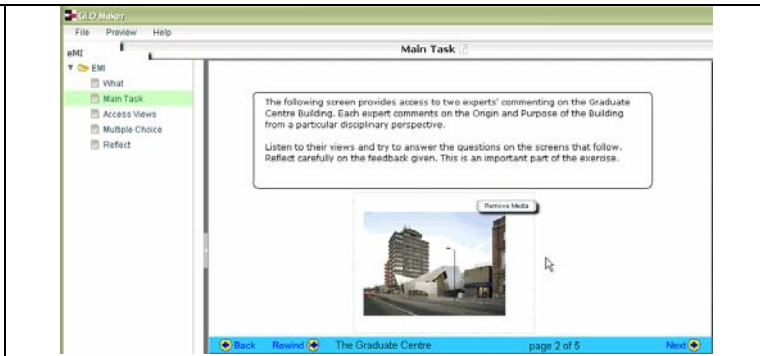
From the 'Files of type' drop down menu, select 'All Files' – to display all files in the folder.

Select image called: **img\_full6.jpg**



This image will now display.

**Save** your work see **Step 3 of 8.**



**Step 5 of 7**

Click on **Access Views** from the left panel

To add an image of an 'expert' click on the **Add Expert** icon

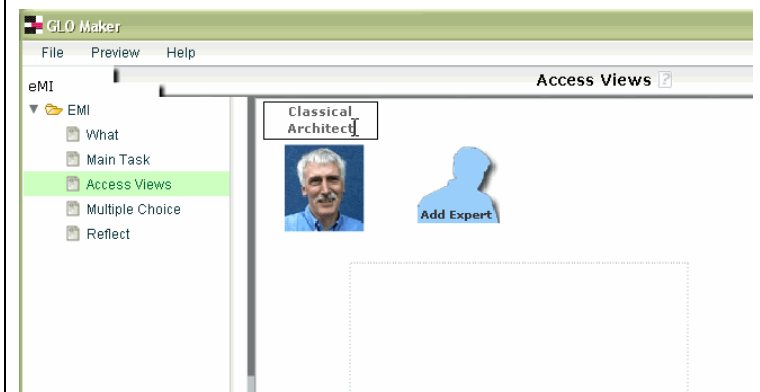
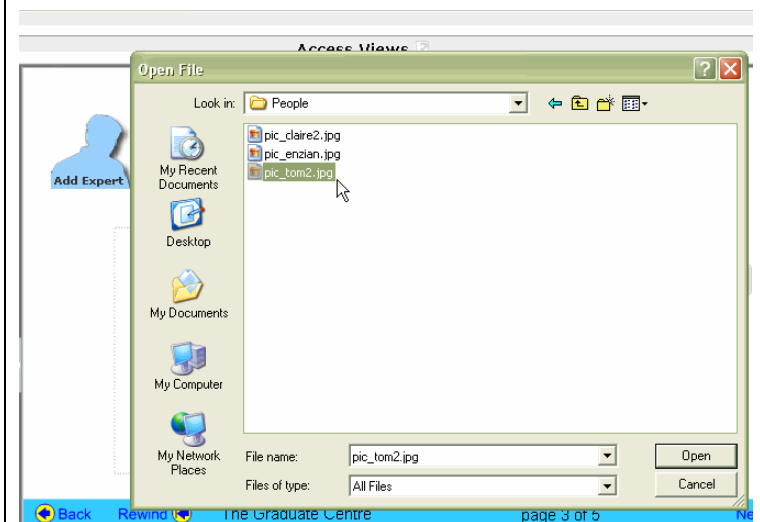
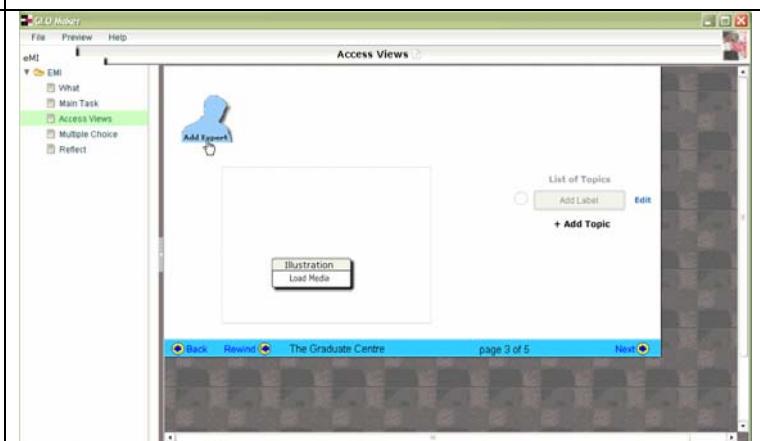
From the '**training materials**' folder, select the **images** folder and then the **People** folder

Select image '**pic\_tom2.jpg**'

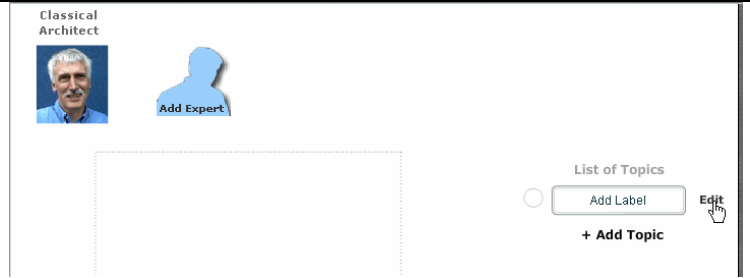
And click **Open**

This will display the a thumbnail image of the expert

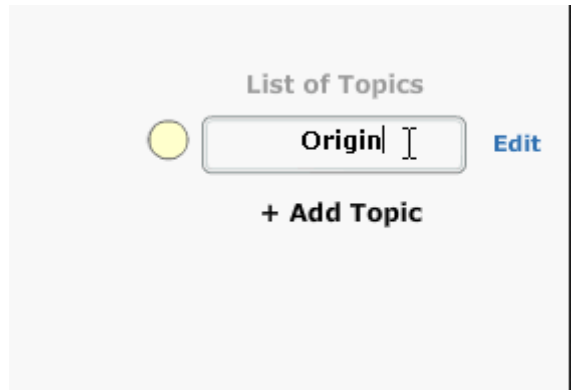
Now add a title by **clicking inside the title window** of the expert and type: **Classical Architect**



Now add a topic name that the expert will be discussing.

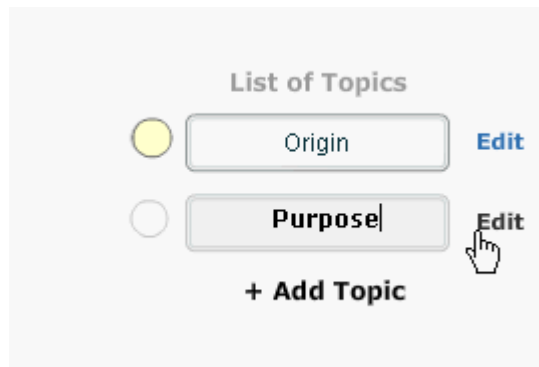


Under the heading 'List of Topics' (on the right), click **Edit** (beside the 'Add Label' button)



This will allow to type in a topic label

Click on '+ Add Topic' to add another topic label



Label the button 'Purpose'

*We will only use 2 labels for this example but you can add up to 5.*

To add audio and transcript files to the experts

**Click** on the expert image and the 'edit' option will appear.



Click on **Edit**

This will open the 'Expert Details' card. You can add audio and transcript files here.

Next to the **Origin** label click on the **Browse** button.

From the media\_resources select the '**audio**' folder

Choose **origin\_male\_voice.mp3**

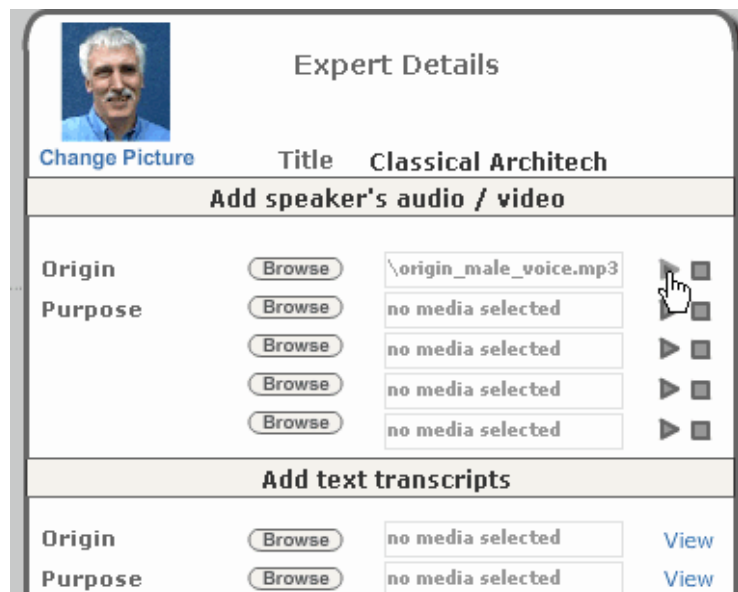
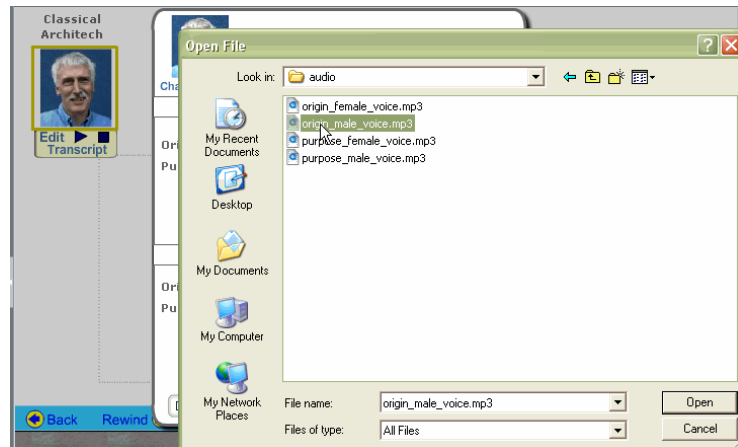
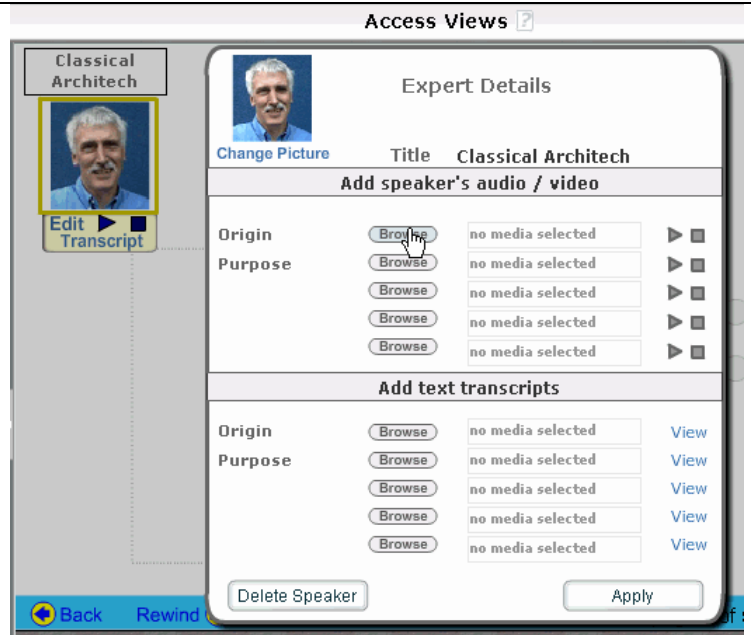
And click **Open**

If you want to listen to what you have added, click on the '**play**' icon on the right and you should hear the audio.

Add another audio file for the 'Purpose' label using the same steps.

Choose **purpose\_male\_voice.mp3**

Under the '**Add text transcripts**' section add transcript files for this expert:



Click on the **Browse** option next to **Origin** and navigate to the **media\_resources** folder

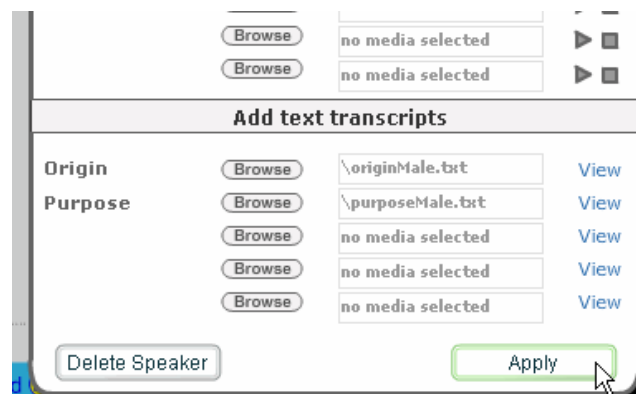
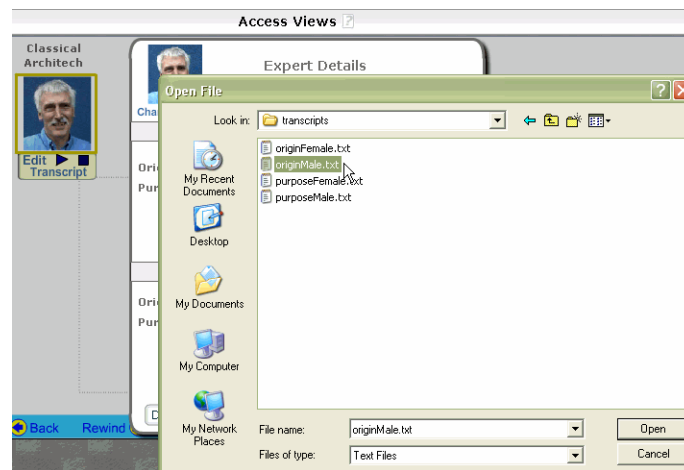
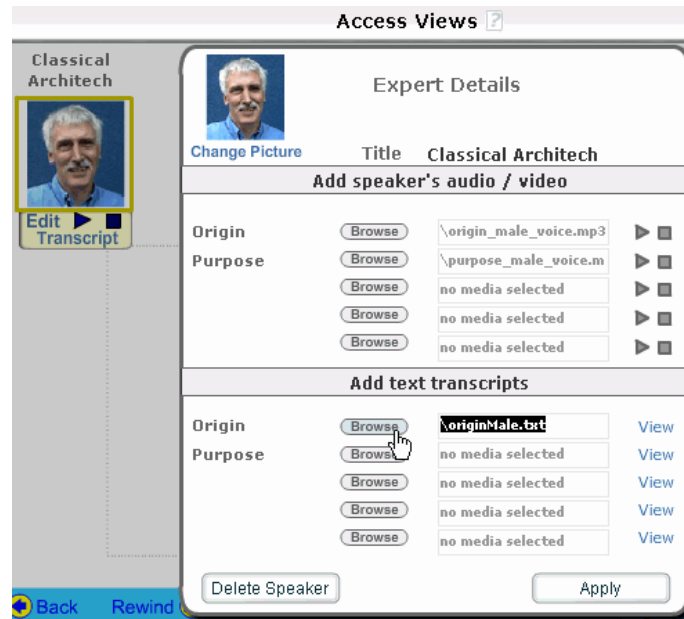
From the **'Transcript'** folder, choose:  
**originMale.txt**

Do the same for Purpose. Click on the **Browse** next to Purpose and from the **'Transcript'** folder, choose:

**purposeMale.txt**

And click **Apply**.

You can now play the audio files from the **'Access Views'** page



Add the second expert following the same instructions as in Step 3.

Just make the following changes:

- Insert image from **People** folder called **'pic\_enzian.jpg'**
- Type in the expert's title as: **'Contemporary Architect'**

Click on the 'expert image' so the edit option appears.

Under 'Add speaker's audio / video' add the following file for origin

- origin\_female\_voice.m p3

And add the following file for purpose:

- purpose\_female\_voice .mp3

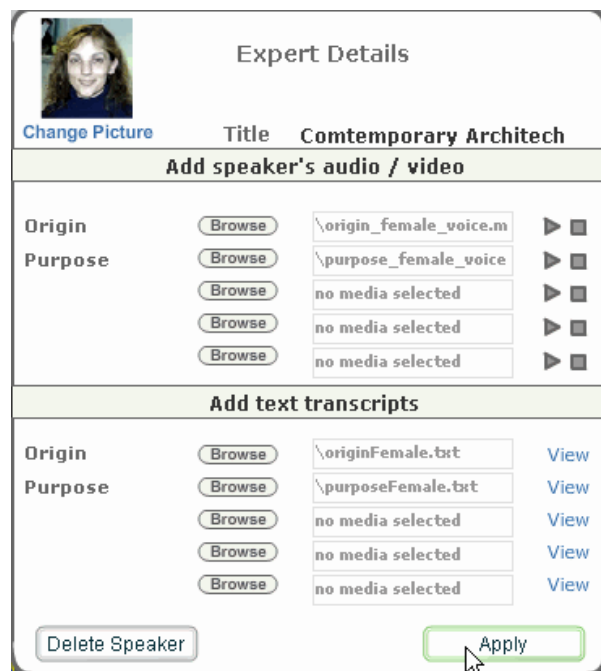
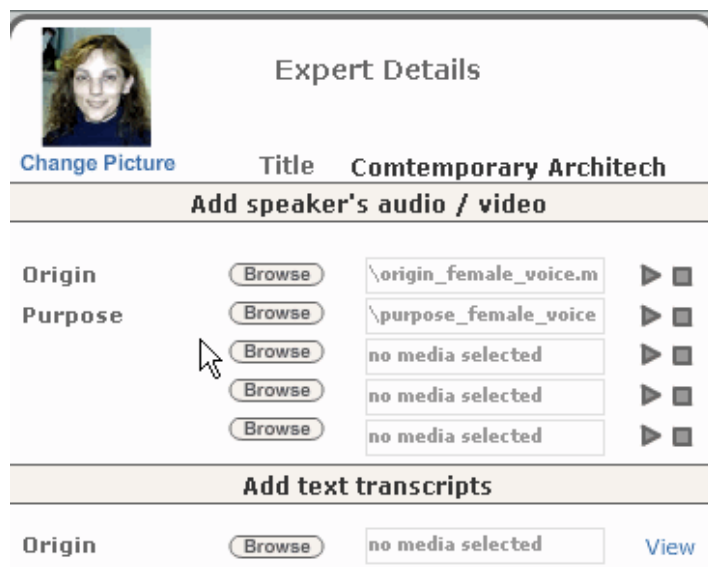
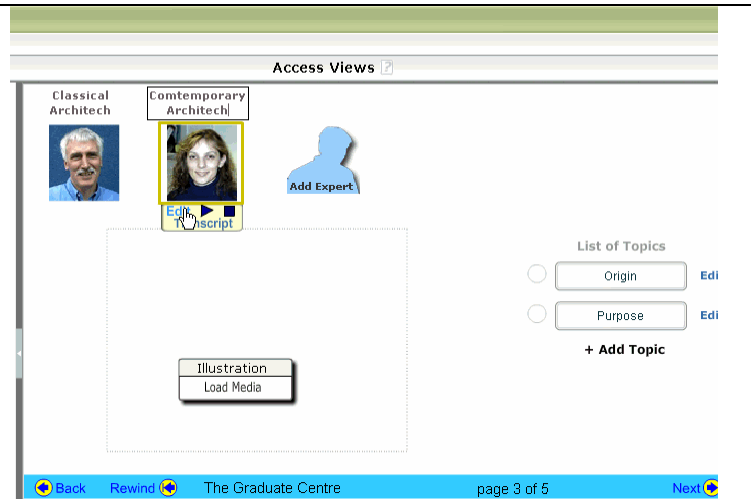
Under 'Add text transcripts' add the following file for origin:

- originMale.txt

And add the following file for purpose:

- purposeMale.txt

And click **Apply**.



Insert an image in the main area (this is what the experts are discussing)

Click on **Load** on the Illustration button

Browse the 'images' folder in the training materials and choose from the Buildings folder:

- img\_full1.jpg

Click Open

The image will now appear on page.

Select one of the topics from the list, such as Origin

Click on an 'expert' so the Edit option appears,

Click on the 'play' arrow to hear audio.

**Save** your work see **Step 3 of 7.**

Access Views

Classical Architect Contemporary Architect

Load animation (swf), video (flv) or image (jpg, gif, png)

Illustration Load Media

List of Topics

Origin Edit

Purpose Edit

Topic

Back Rewind The Graduate Centre page 3 of 5 Next

Open File

Look in: Buildings

img\_full1.jpg

img\_full6.jpg

p32529\_8.jpg

w89981\_8.jpg

File name: img\_full1.jpg

Files of type: JPG Files

Open Cancel

Access Views

Classical Architect Contemporary Architect

Edit Transcript

Remove Media

List of Topics

Origin Edit

Purpose Edit

+ Add Topic

Back Rewind The Graduate Centre page 3 of 5 Next

**Step 6 of 7**

Select **Multiple Choice** from the left panel

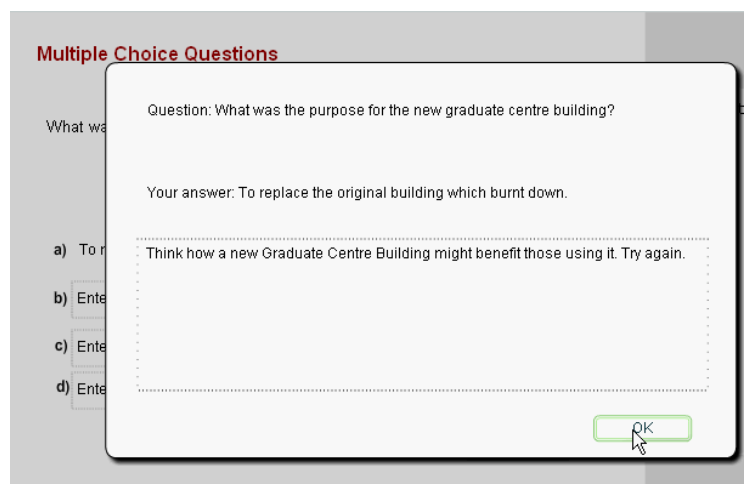
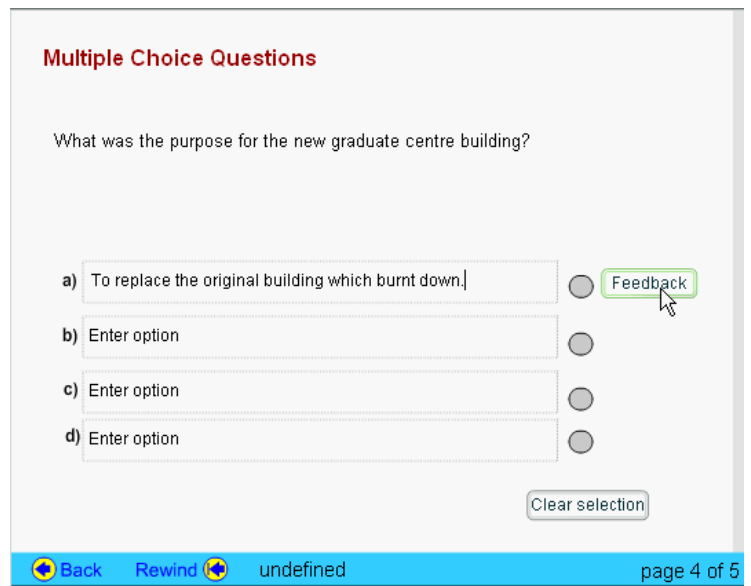
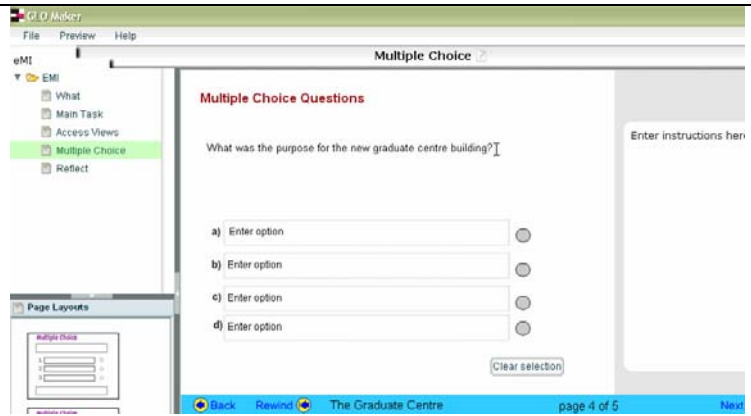
Copy the Multiple Choice Question from 'emi\_core\_text.doc' found in the 'media\_resources' folder.

Copy and paste answer for a):

A **Feedback button** will automatically appear, click on this feedback button to add feedback to answer a).

Copy and paste feedback for answer a) and click **OK**

Repeat these steps for answers b) to d)



You have to indicate the correct answer.

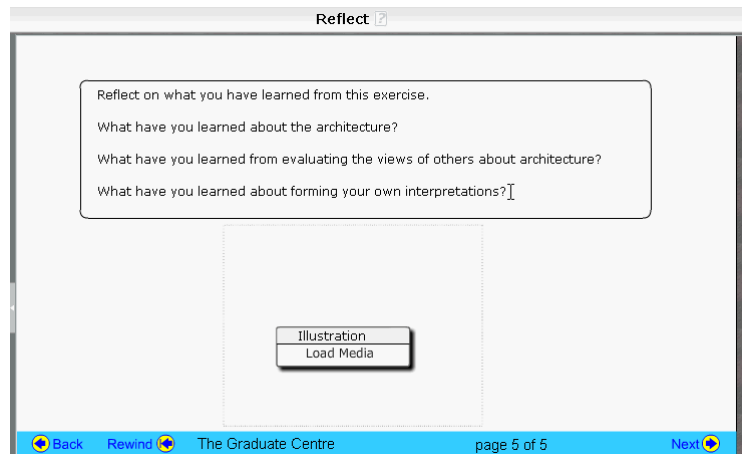
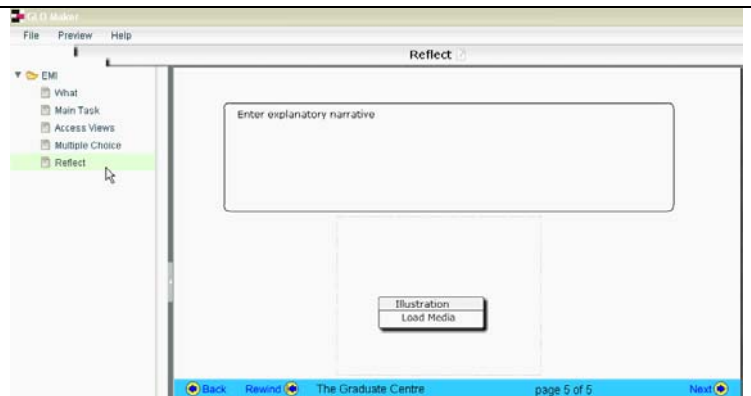
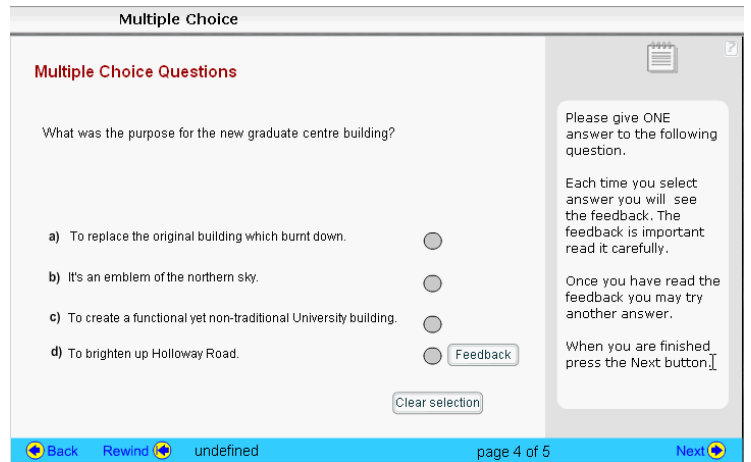
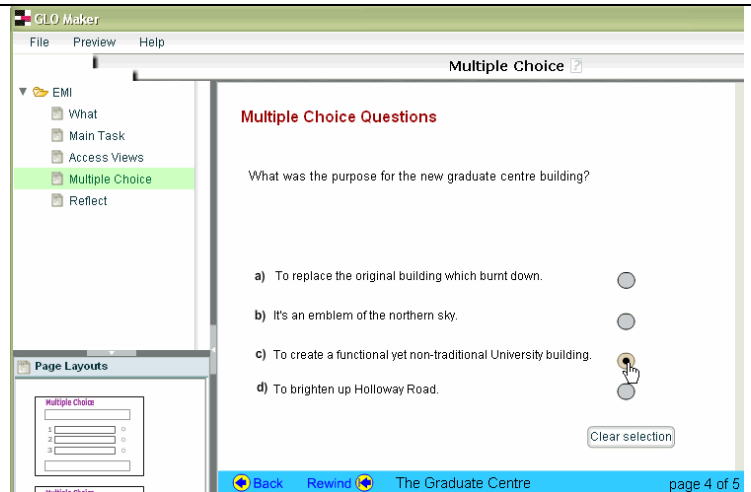
Select the **radio button** for answer **c)**.

It is very important to provide learners with clear instructions, copy and paste these instructions into the narrative window on the right.

**Step 7 of 7**

Select the **Reflect** from the left menu

You can either type your own text into 'Enter explanatory narrative' window or you can copy and paste text (from the 'emi\_core\_text.doc').

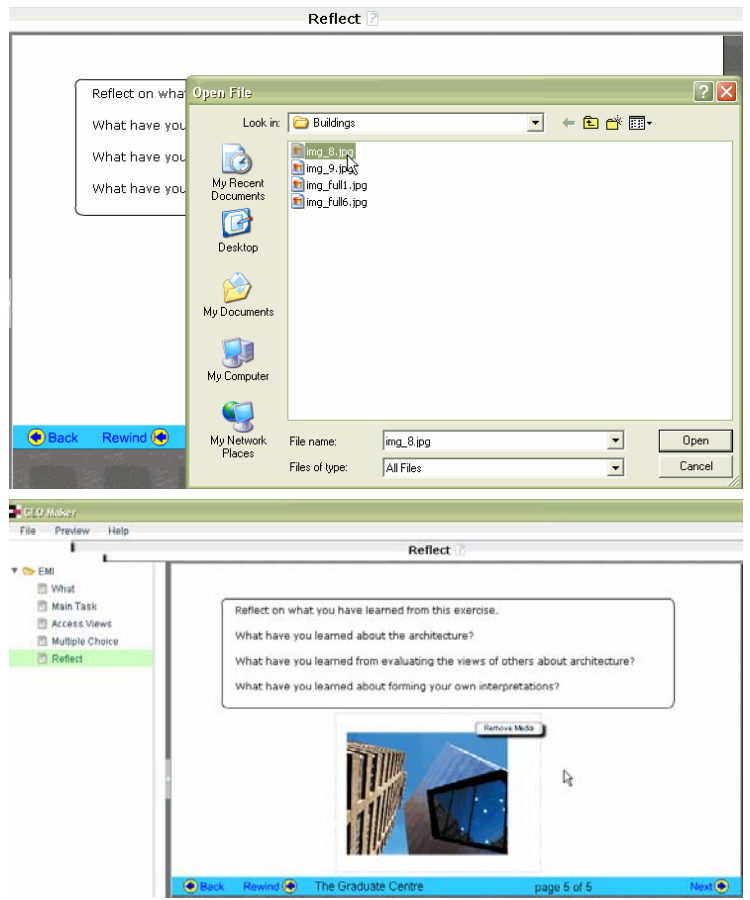
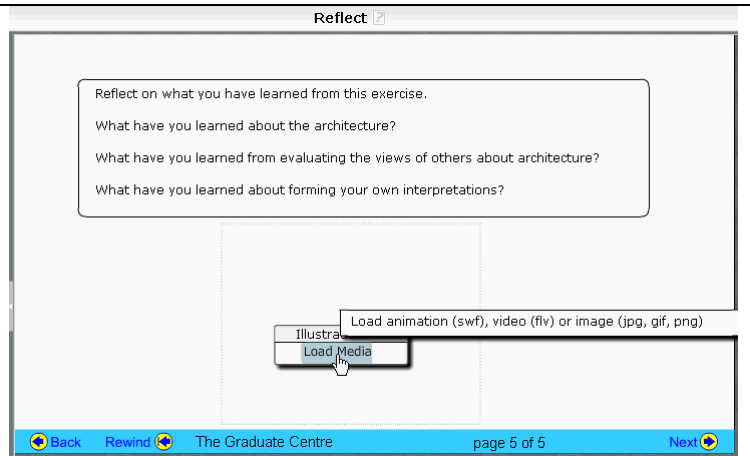


To add an image to this page click on **Load Media** from the Illustration button

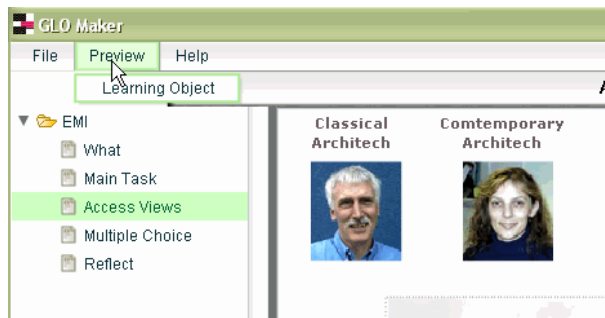
In the **Images** folder, select **Building** and select **img\_8.jpg** and click **Open**

The image should now display on the screen.

**Save** your work see **Step 3 of 7.**



**Click preview to see the GLO you have just created**



By the end of this section you should have completed a new GLO based on the eMICore design pattern. Close GLO Maker.

### Opening an existing GLO

Use GLO Maker to open an existing GLO; the following example will use 'The Graduate Centre' GLO which was created earlier.

Open GLO Maker by double clicking the **Icon** found on your desktop.



Click on **Create Screens** from the option window



Click on the '**Open existing file/project**' button.

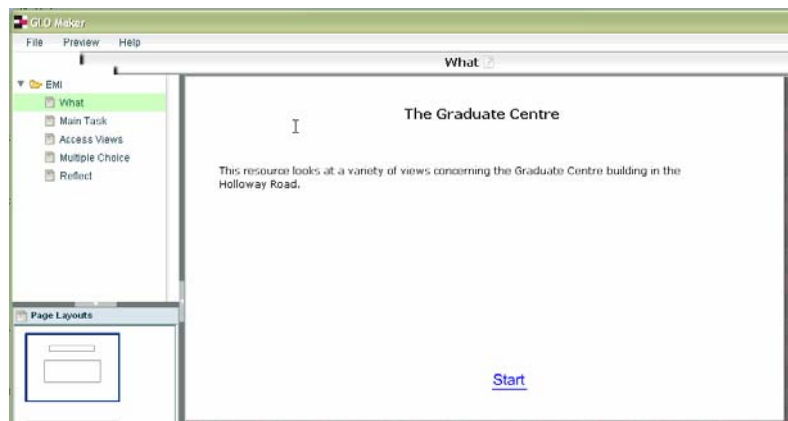
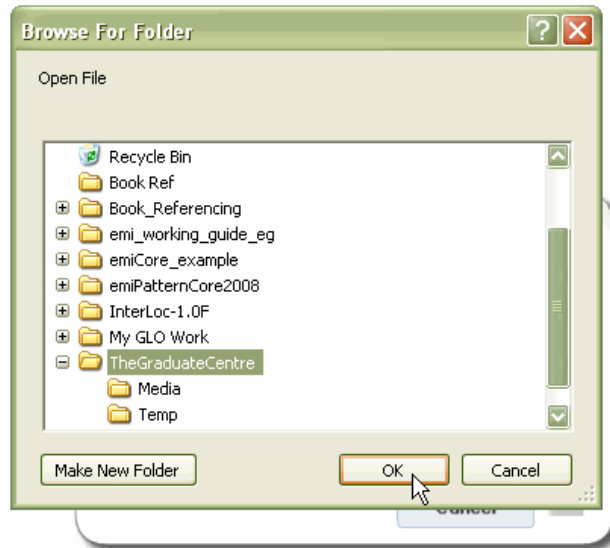


This will open the  
**'Browse For Folder'**  
window

Navigate to where you  
previously saved your  
work and click on the  
folder called  
**'TheGraduateCentre'**  
(if you used a different  
name, remember to  
just click on the folder  
– do not click on the  
folders inside the  
named folder).

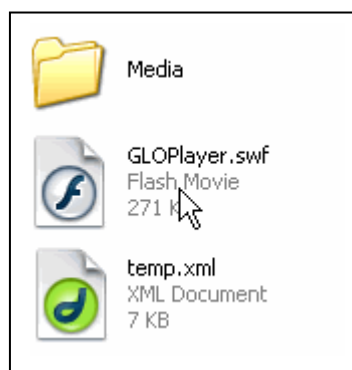
Click **OK**.

The Graduate Centre  
GLO should now open  
in GLO Maker.



### **Save the new learning object for access by learners**

To view a finished GLO outside the authoring tool go to the folder where the GLO was saved, open the folder (inside you will see 1 folder and 2 files) please see image below. Double clicking on the icon called 'GLOPlayer.swf' will play the GLO (from learners view).

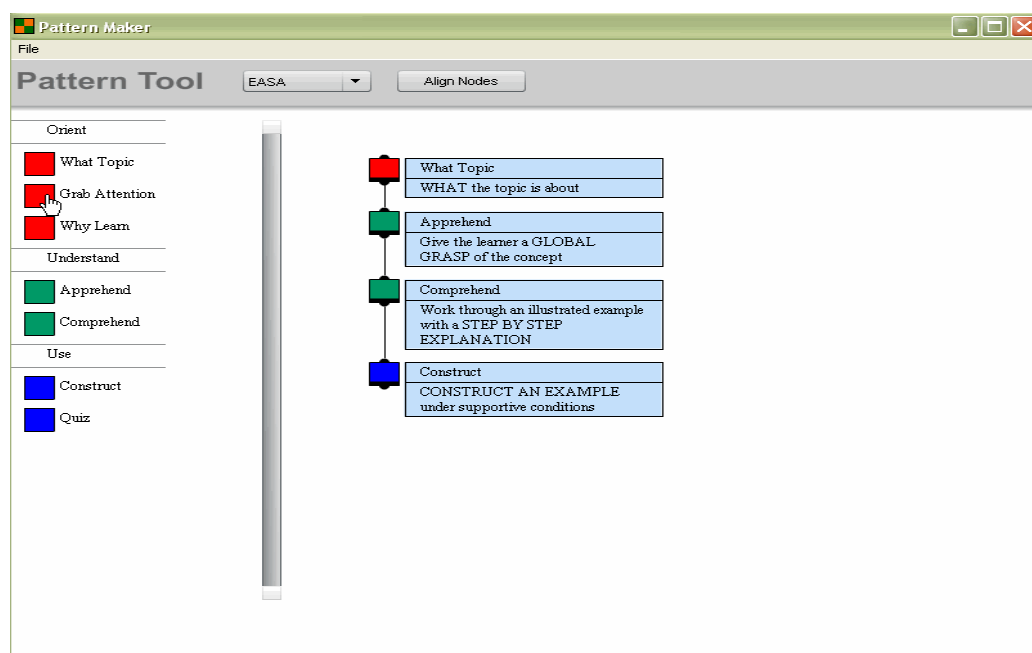


Inside the 'TheGraduateCentre' folder

Please note: all files and folders of a completed GLO must remain together. See appendix 3 for details on how to display just the GLOPlayer.swf icon to learners.

## Section 3. Using the Storyline interface to create and adapt learning objects

A new feature added to version 1 is a drag-and-drop interface that allows users to create a new learning object or to adapt the structure of existing learning objects. To access the drag-and-drop interface click “Create Storyline” on the introductory screen. This will load a drag-and-drop interface screen that allows you to create and adapt the “pedagogical storylines”.



Drag and drop interface where you can create and adapt ‘pedagogical storylines’.

The storyline represents the pedagogical functions in the learning design and how these are linked or sequenced together. This interface may be used to view the top level storyline of the learning design. It consists of a “palette” of pedagogical functions on the left-hand panel of the screen. For each pedagogical pattern there is also a ‘prototypical’ representation of this pattern in the main part of the screen. The user may use this pattern as it is, or adapt it to suit their needs. The patterns may be accessed by clicking the button labelled EASA at the top of the screen.

This is an alternative way to create a new learning object, i.e. you can start at the storyline level. This is, in fact, the more normal way to start, as it provides you with options to adapt and shape the storyline.

In this section we will first show how the structure of the learning object we have already created can be adapted. We will then show how you can create a new learning object from scratch using the freestyle option.

### **Adapting the structure of an existing learning object**

We will now adapt the storyline of the EMI pattern by adding two new nodes: we will add a “Why Learn” option, and we will then add an extra “Multiple Choice” node. When you open Pattern Maker, the EASA (Explain and Show Amplified) pattern will be displayed by default.

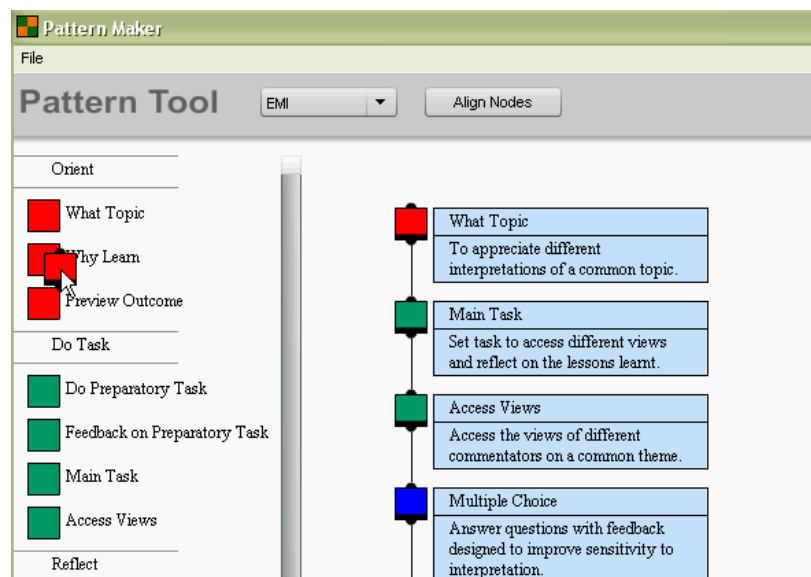
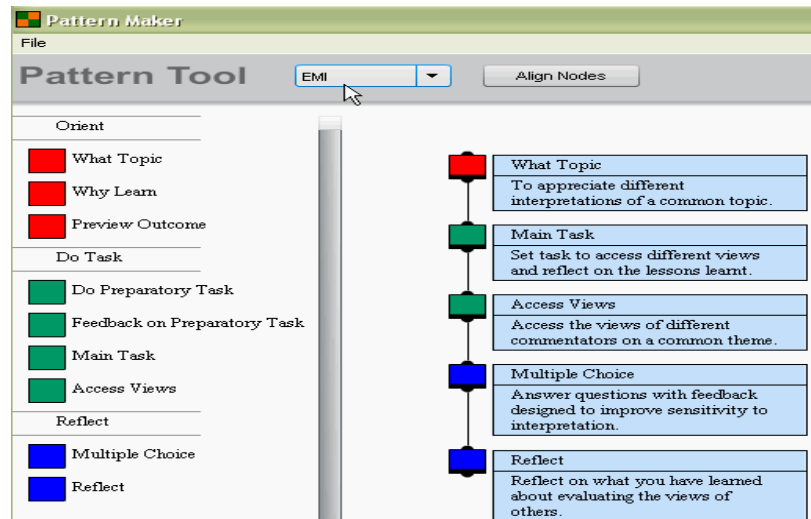
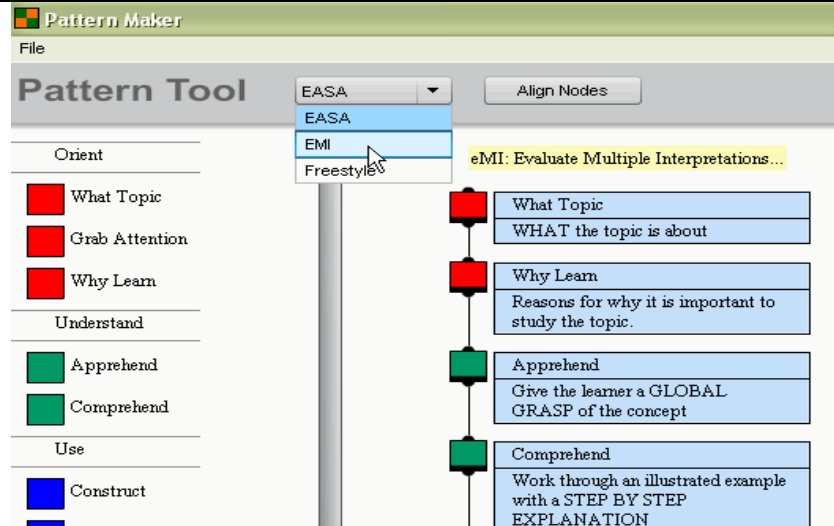
**Adding a new node to the EMI storyline**

After opening Pattern Maker change the pedagogical pattern from EASA to EMI.

**Click** on the button displaying **EASA** and from the drop down menu select **EMI**.

The EMI storyline should now be displayed.

**Click** on the 'Why Learn' node in the left hand menu and you will be able to drag the node.



Drag the node anywhere in the main work area and release.

Now join up the new node between the 'What Topic' and 'Main Task' nodes.

Click on the black area of the 'What Topic' node and start to drag. This should display a connection line.

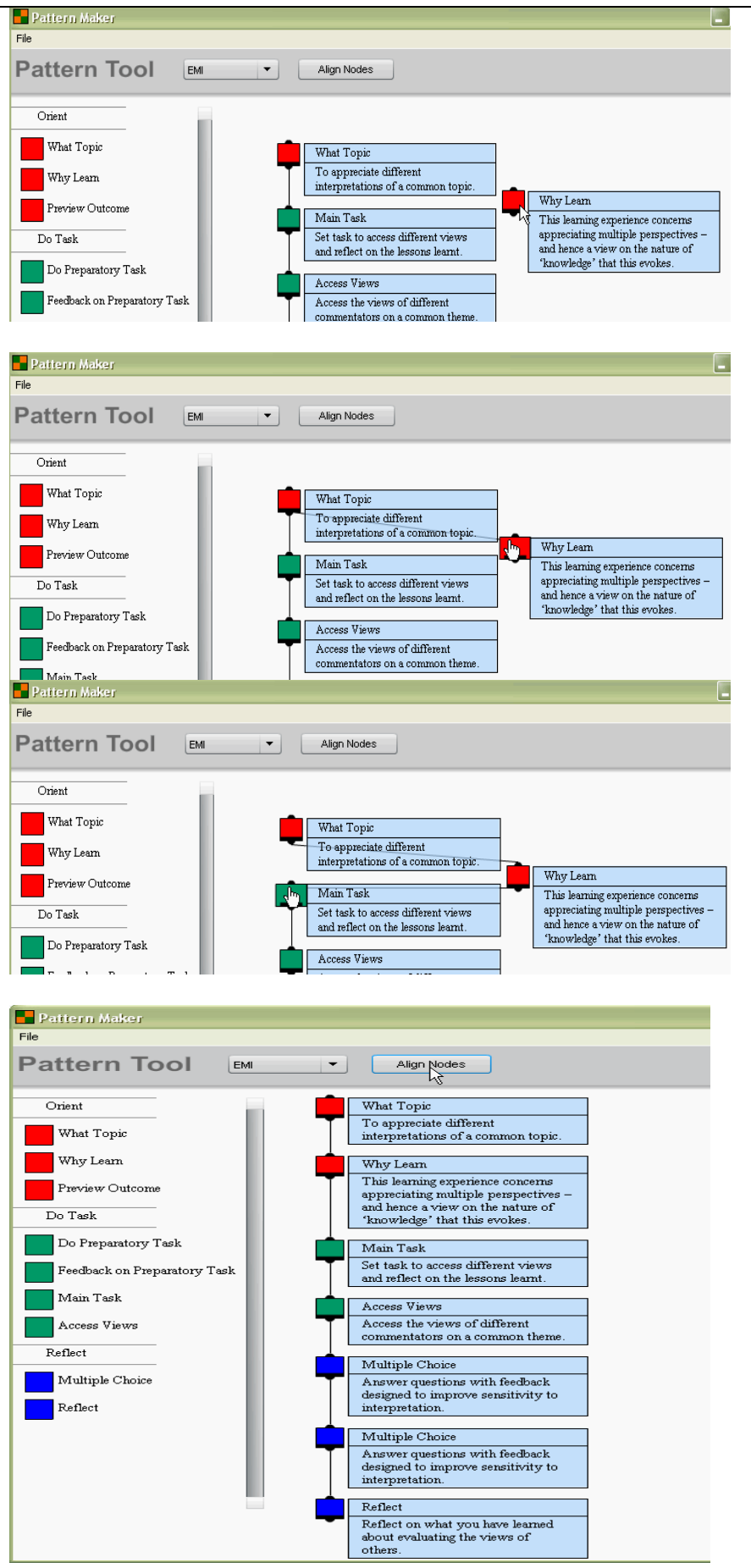
Drag the connection line over to the 'Why Learn' node and release.

Connect the 'Why Learn' node to the 'Main Task' node by clicking on the black area of the 'Why Learn' node.

The 'Why Learn' node has now been inserted into the 'pedagogical storyline'.

To tidy up the storyline layout, click on '**Align Nodes**' button at the top.

Use the same procedure to add another 'Multiple Choice' node (between the first 'Multiple Choice' node and 'Reflect' node in the storyline).



### Saving your Work

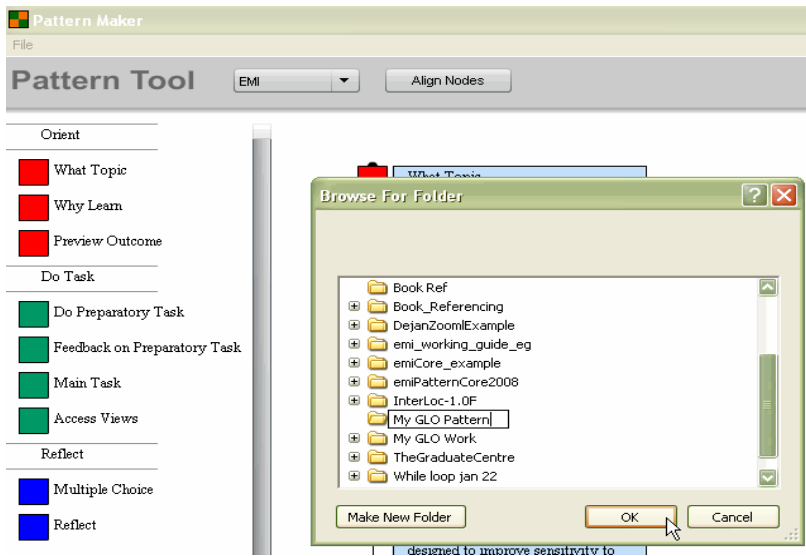
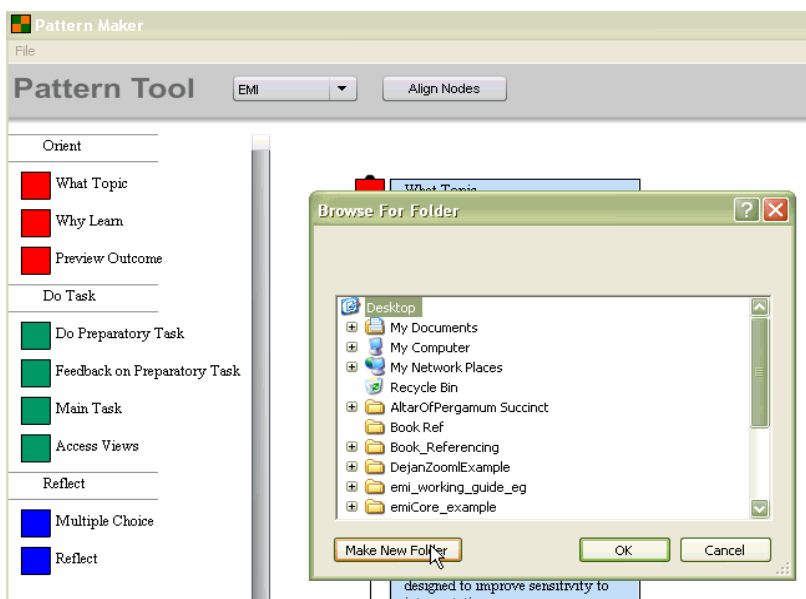
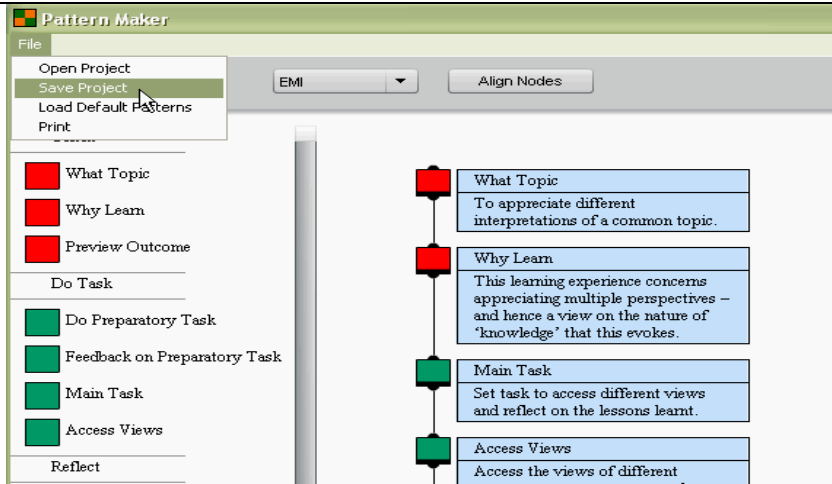
To save your pedagogical pattern (storyline), select **File** from main menu.

From drop down list select **Save Project**

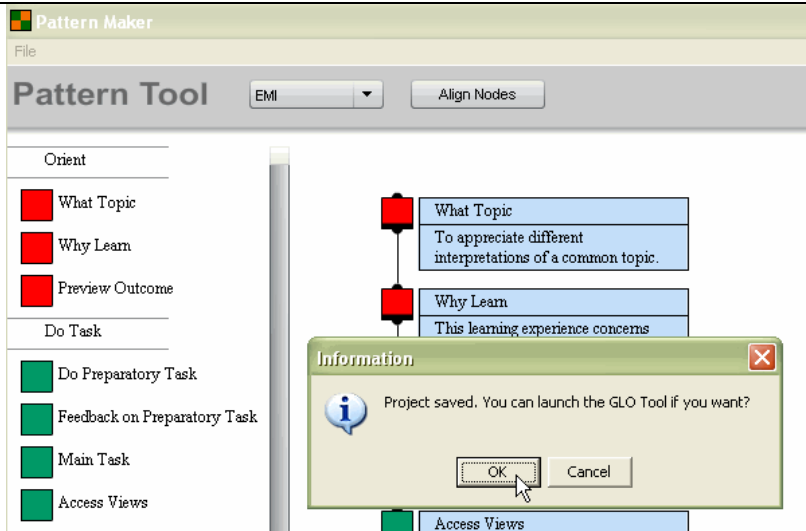
The **Browse for Folder** pop up window will open.

Select 'Desktop' and click on the **Make New Folder** button.

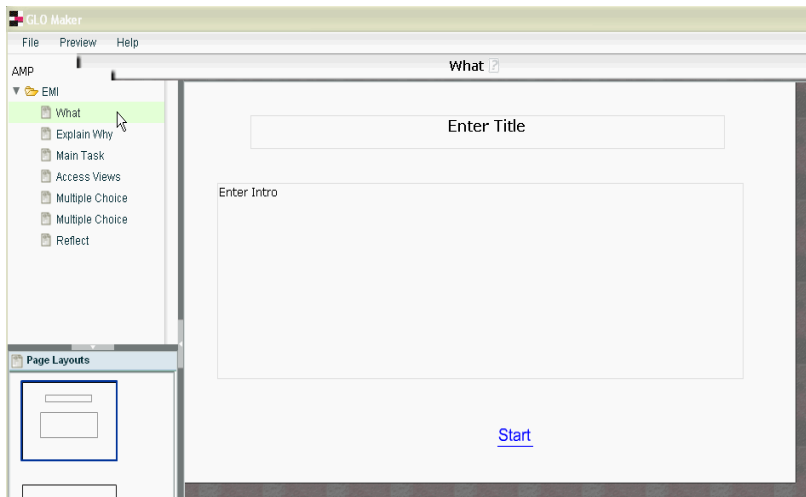
Name the new folder: **'My GLO Pattern'** and click **OK**.



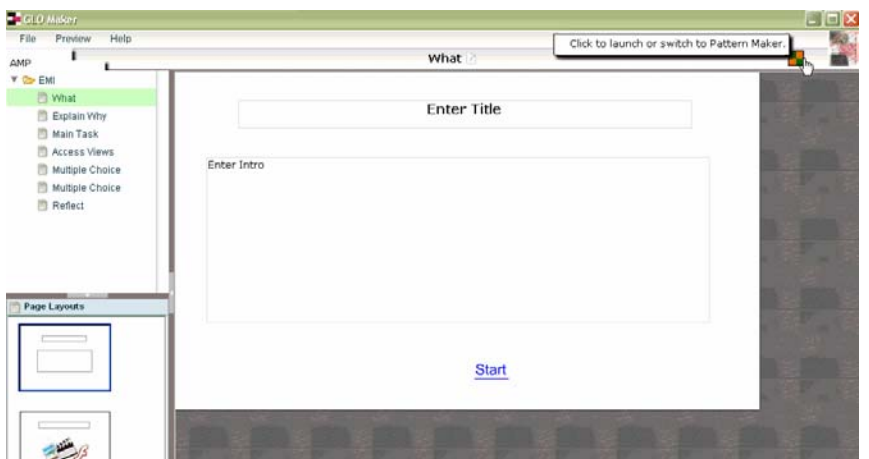
You will be asked if you wish to launch GLO Maker, select 'OK' (this will launch GLO Maker).



Once GLO Maker has opened, it will display the 'storyline' you created in page layouts, ready for you to add your content.



**Note:** while in GLO Maker you can go back to Pattern Maker to edit your 'storyline' - just click the **Pattern Maker icon** on top menu bar.



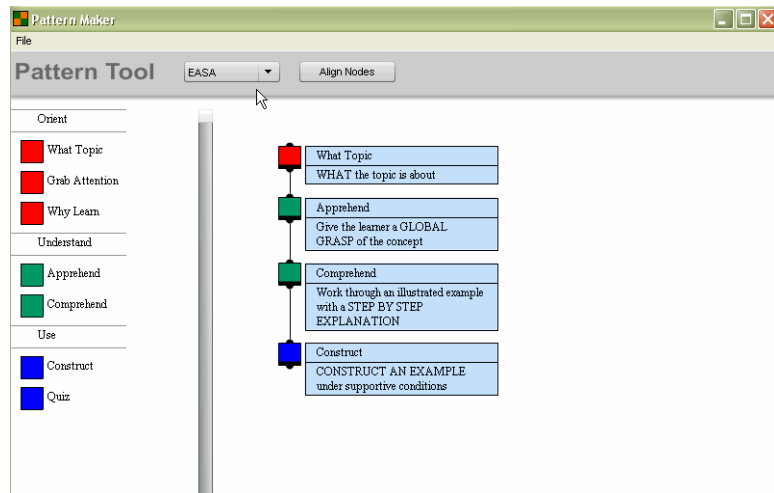
To carry out the same procedure to the EASA (Explain and Show Amplified) pattern please see appendix 4.

## Creating a new learning design using the freestyle pattern

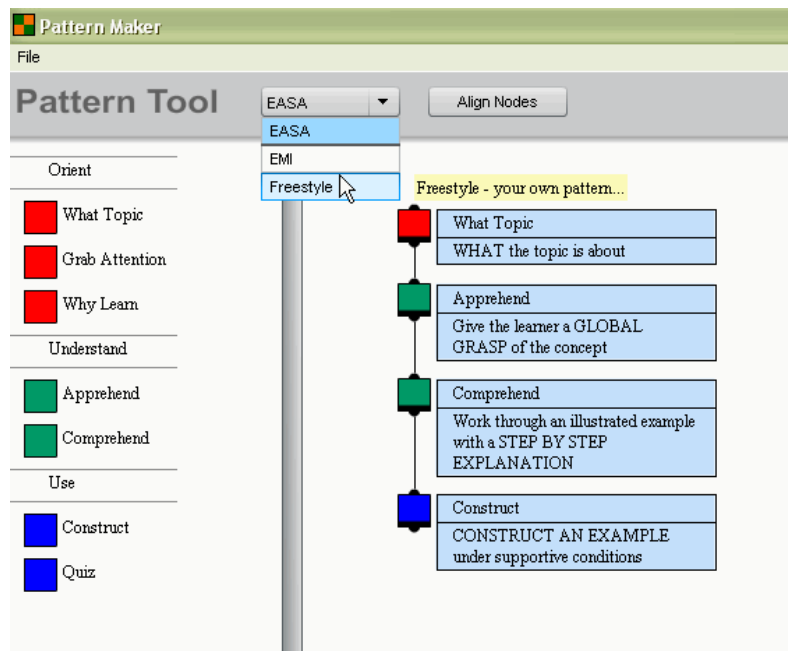
Open GLO Maker and select **Create Storyline**



This will open Pattern Maker. By default the EASA pattern 'storyline' will be displayed.

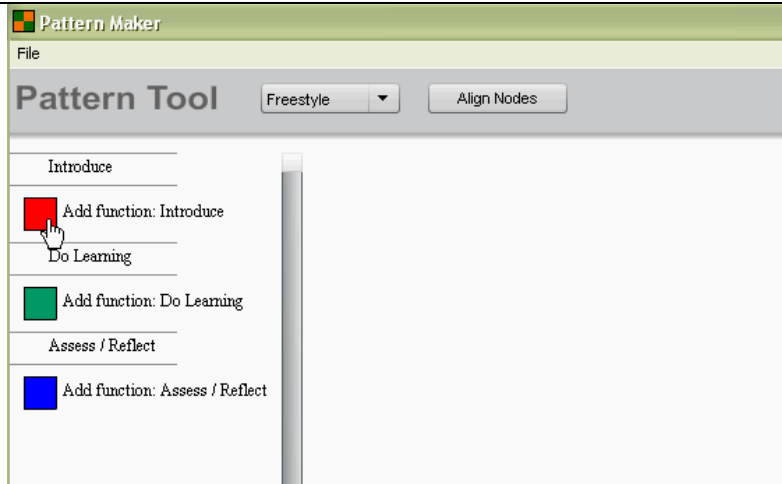


Click on the button displaying EASA and from the drop down menu select **Freestyle**

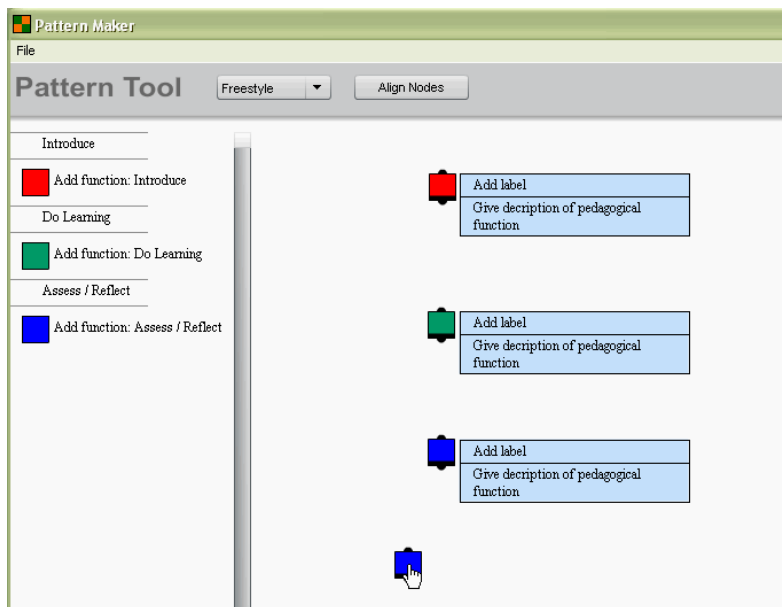


This will remove the current 'storyline' on main screen area.

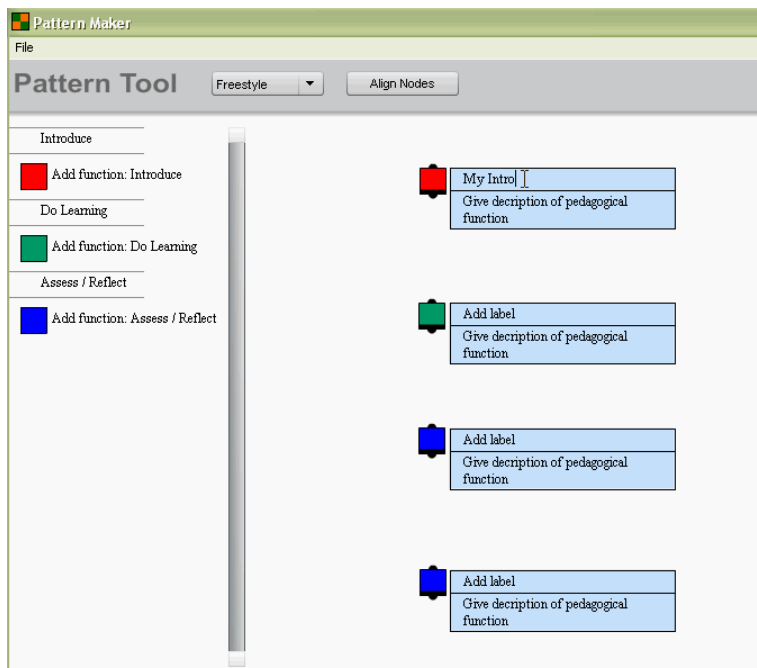
From the left hand menu select and drag **'Add function: Introduction'** node onto the main screen area.



Select and drag **'Add function: Do Learning'** node onto the main screen (under **'Add function: Introduction'** node).



Select and drag **'Add function: Assess/Reflect'** and place (under **'Add function: Do Learning'** node).



Repeat this step so there are two **'Add function: Assess/Reflect'** nodes.

We will now label each node in the **'storyline'** and describe the function.

In the first node add a title, this example uses **'My Intro'** - but you can add your own text for both **'Add Label'** section and **'Give description of pedagogical function'**.

Once you have added your text to all nodes we need to join the nodes together.

**Note:** if you are unsure what to write just copy text in this example.

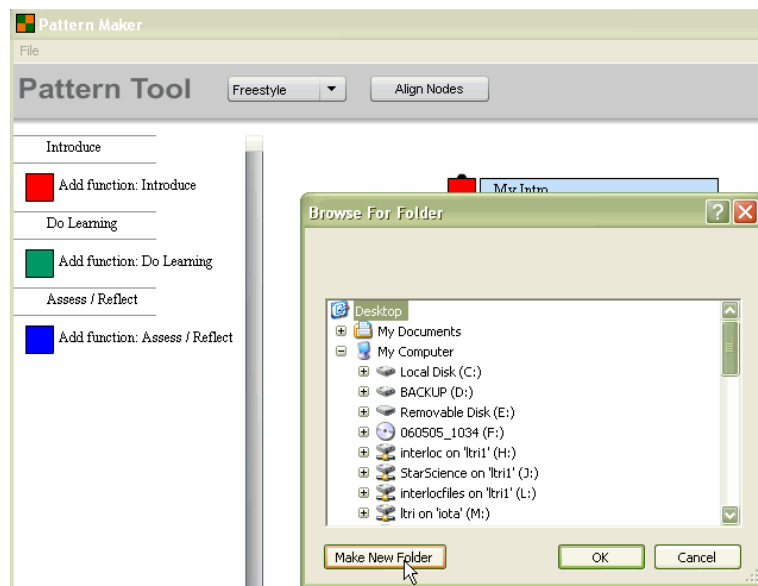
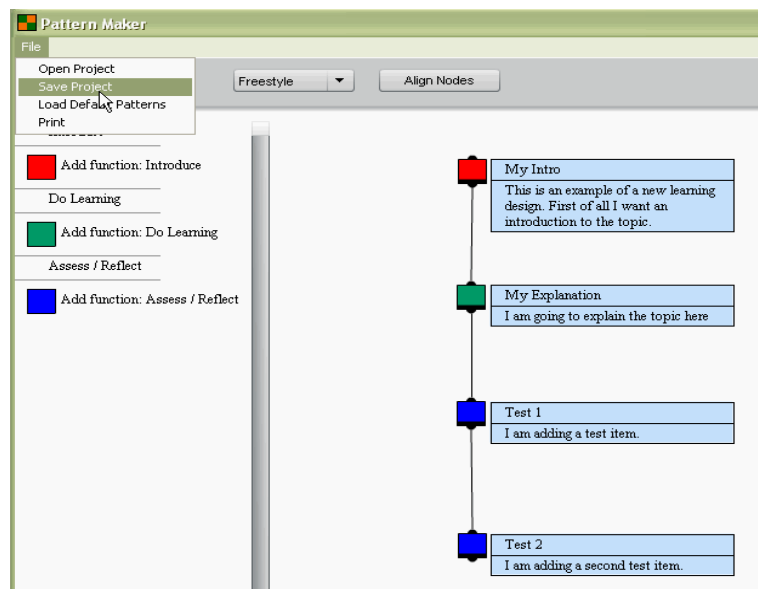
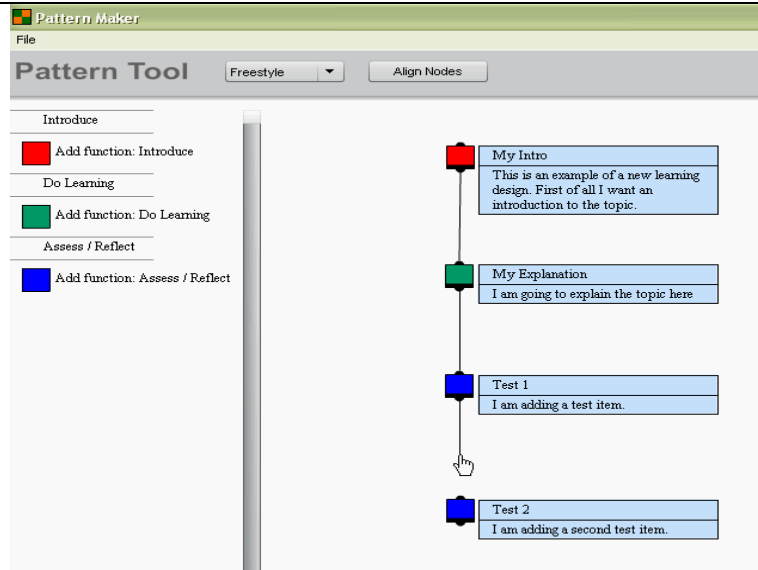
Click on the black area of the first node (My Intro), a connection line should appear, drag this to the node below (My Explanation).

Repeat, until all nodes are joined.

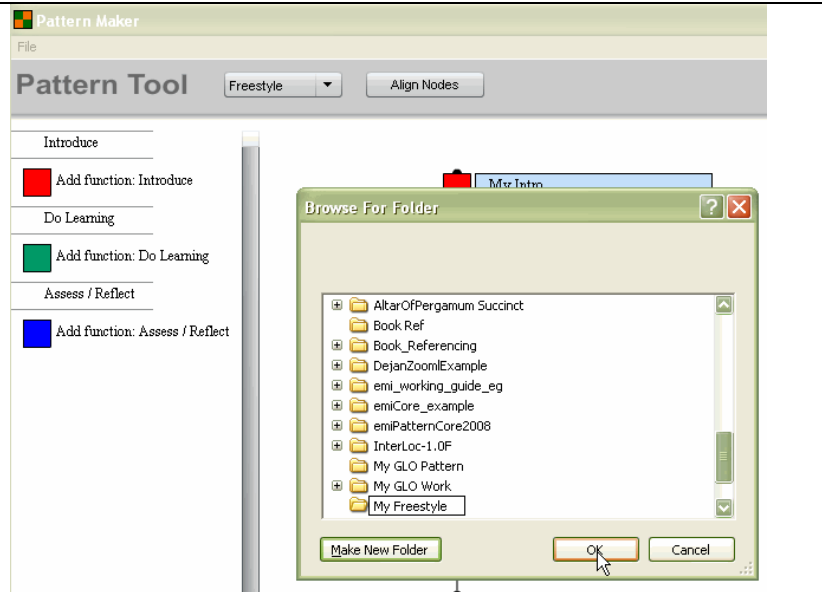
To **save** your pedagogical pattern (storyline) select **File** from main menu, and select **Save Project**.

The **Browse for Folder** pop up window will open.

Select 'Desktop' and click on the **Make New Folder** button

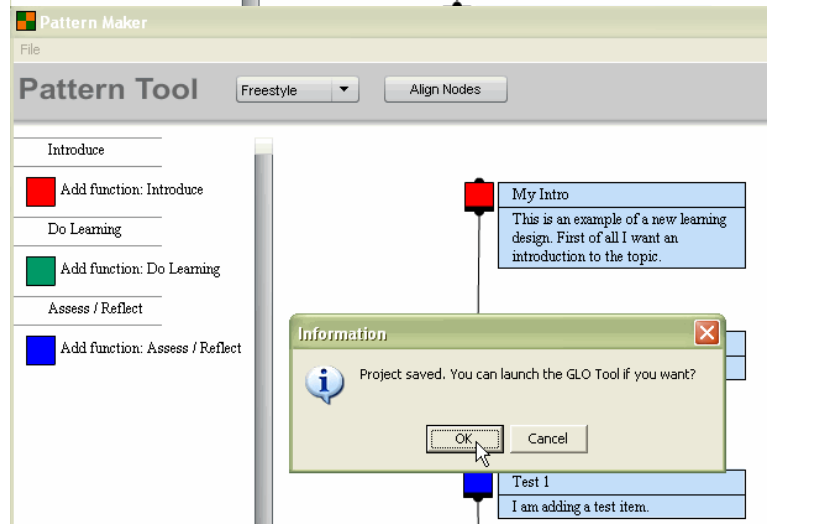


Choose a name for your new folder and click **OK**

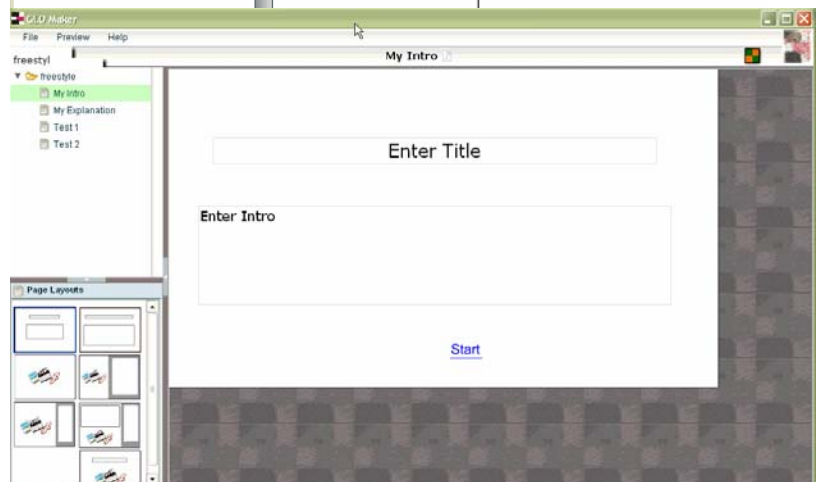


A dialogue box will appear asking if you wish to launch GLO Maker.

Click on **OK**.



Once GLO Maker has opened, it will display the 'storyline' you created in page layouts, ready for you to add your content.



## Appendix 1 Download and Setup Instructions for Internet Explorer

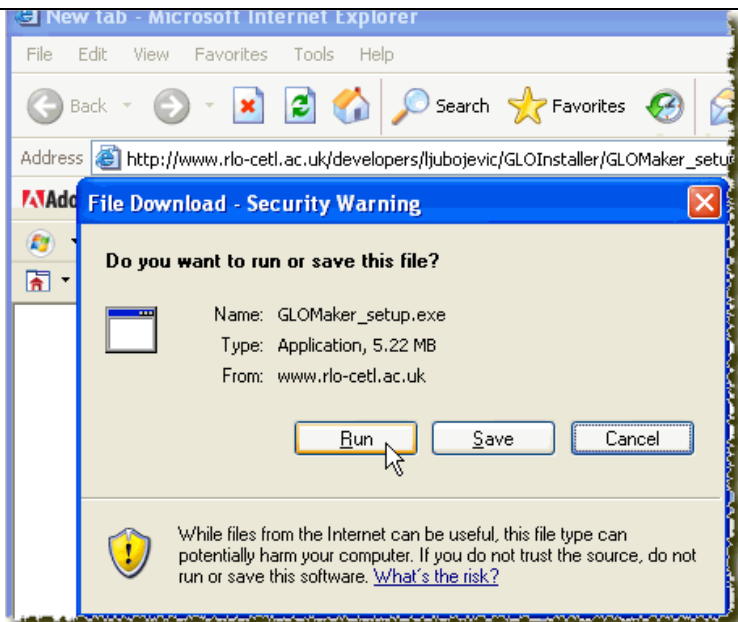


### Using Internet Explorer Browser

To download the GLO Maker software type the following URL into a browser:  
<http://glomaker.co.uk/download.htm>

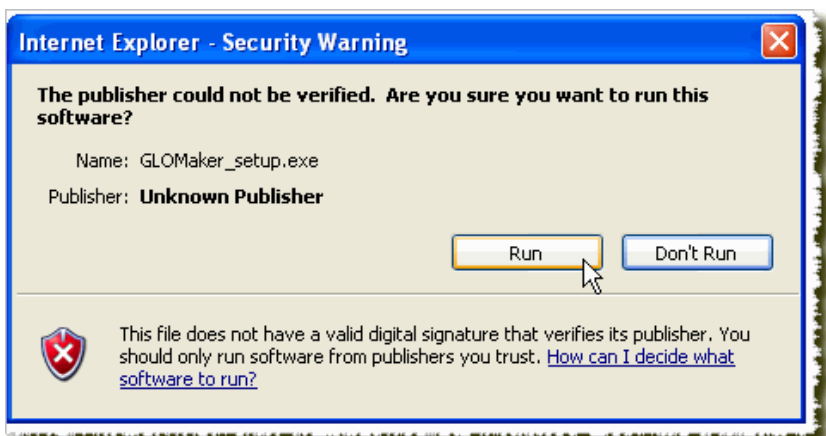
- A window will open asking whether you would like to run/save file

- Click **Run**

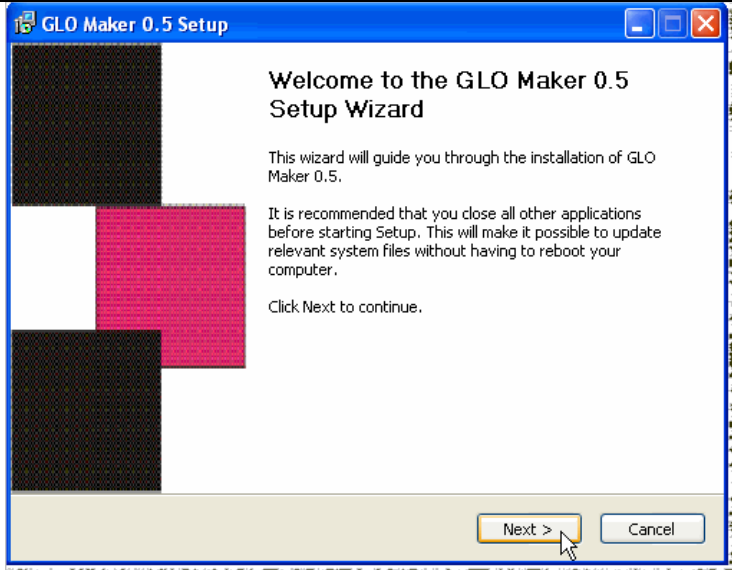


- An automatic warning will display (to verify that you wish to run the software)

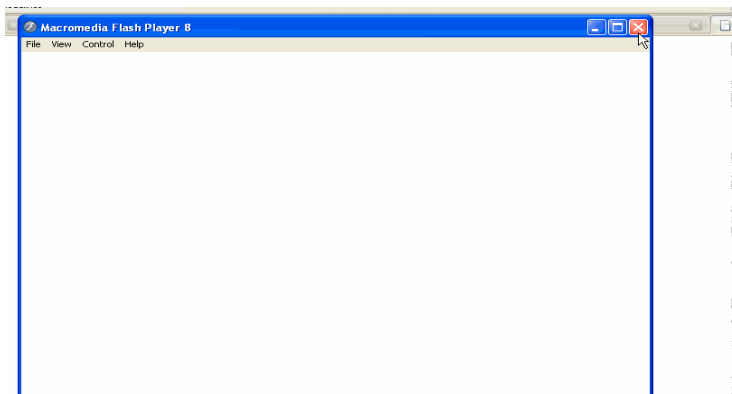
- Click **Run**



- The Setup window will open
- Click **Next** to continue with the Setup and follow the onscreen instructions

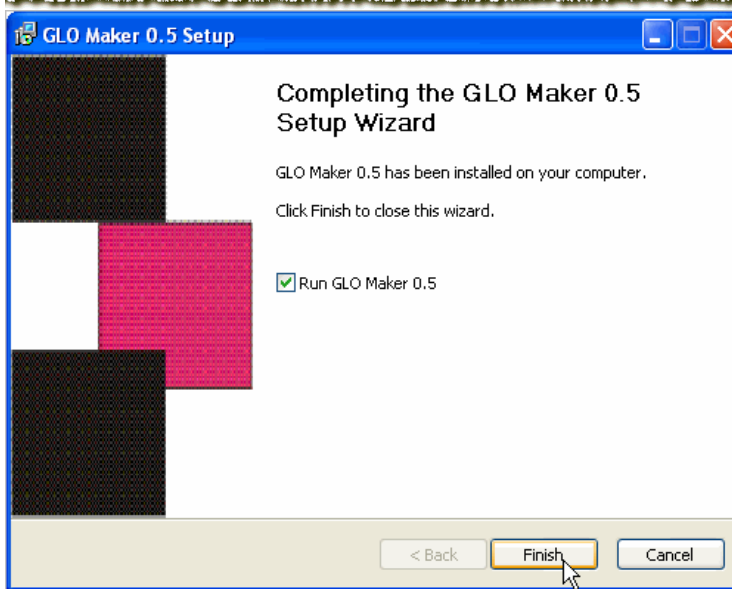


- At the end of the installation process a blank window will open up
- **Close** this window

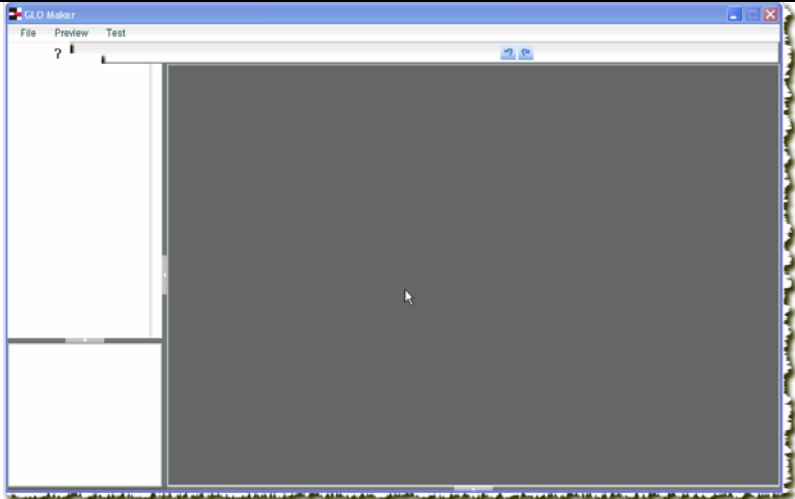


- Click **Finish** from the setup window

*(Notice that the 'Run GLO Maker' is automatically set to run upon completing setup. You can unselect this option if you do not wish to run GLO Maker)*



- GLO Maker will automatically open up ready for use



- You should also see the GLO Maker icon on your desktop



## Appendix 2 –file formats compatible with GLO Maker

### 1. Overview of media file formats compatible with GLO Maker

The GLO Maker software is compatible with most of the widely used media file formats for each of the 5 media types:

- audio
- video
- interactive animation
- text
- image

#### 1.1 Audio



The only audio media file format presently compatible with GLO Maker is MP3 - **MPEG-1 Audio Layer 3**, the file extension for this format is **.mp3** or **.MP3**. It is a widely used file format and there are many tools that are freely available for conversion of whatever audio format to the MP3 one. One such tool, called Audacity, is described in section 2 of this appendix.

#### 1.2 Video



The only video media file format presently compatible with GLO Maker is FLV – Flash Video, the extension for this file format is **.flv** or **.FLV**. The choice of this file format for video media was forced by the requirements of the delivery platforms (web browsers and mobile phones primarily). There are several freely available software tools for conversion of whatever video format to the FLV one. One such tool, called Media Coder, is described in section 2 of this appendix.

#### 1.3 Interactive and non-Interactive Animation



The industry standard for this type of media is Shockwave Flash (SWF) from Adobe Flash originally developed by [Macromedia](#) and is now, following their acquisition, a technology from [Adobe](#). The file extension for this file format is **.swf** or **.SWF**. Intended to be small enough for publication on the web, SWF files can contain [animations](#) or [applets](#) of varying degrees of interactivity and function. SWF is also sometimes used for creating animated display graphics and menus for DVD movies, and television commercials. This is the most versatile type of media as it can ‘absorb’ all other media formats and also affords interactive functionality. Although there are a

number of tools that output the media files of this type (usually smaller applications that deal with one set of functionality, e.g. image slide show), the files of this format are made with Adobe Flash application. The GLO Maker is only compatible with SWF files produced/compiled with Action Script 2 (AS2).

## 1.4 Text



Most of the text in the GLO instances is stored inside the XML file and does not require any additional formatting or explanation. Presently the GLO Maker software prototype uses external text media in only one page instance (Access Views – transcript of the audio media) and it is of simple text format **.txt** or **.TXT**. Note – when typing transcripts text into text files (that you consequently load into the LO) you can use standard html style tags, for example `<b>this</b>` would result in **this**, `<i>this</i>` would look like *this* – finally `<b><i>this</i></b></i>` would look render like *this*.

## 1.5 Images



Presently two image media file types, JPG and GIF, are compatible with GLO Maker. The extensions for these file types are **.jpg** or **.JPG** and **.gif** or **.GIF**. The JPG format is recommended as it has been tested with GLO Maker more completely. Converting whatever image media format to JPG one can be done in a number of freely available image manipulation tools – the most accessible one on a PC platform is a Paint software tool which enables opening of wide range of image formats and allows for conversion to JPG by Save as... and then choosing the .jpg format for the file to be saved.

## **2. Guide to converting media file formats – tools and documentation**

This section explains the acquisition, installation and use of tools for audio and video files conversion to the required format for use with GLO Maker software tool. These tools are discussed only for PC platform, references throughout this section point to the documentation where Mac and Linux platform-deployment of these tools is explained.

### **2.1 Installing and Using Audacity software for conversion of audio files to MP3 format**



Audacity is a free software tool for audio editing/mixing and can also be used to convert from one audio file format to another. The software is available for download from here:

Windows 2000/XP/Vista: [Audacity 1.3.4 installer](#) (.exe file, 2.9 MB)

For Audacity [installation manual click here](#), and read from page 141.

Once Audacity software is installed the audio file of non-MP3 format can be imported for conversion. Please read below for one final issue regarding the conversion to MP3 format.

The following is abbreviated from Audacity Manual ([available here](#)), page 92:

#### **Exporting MP3**

Audacity cannot encode MP3 files by itself, because the MP3 encoding algorithm is patented and cannot legally be used in free programs. However, Audacity has been programmed to recognize other existing MP3 encoders that you can download separately. All you have to do is obtain the appropriate MP3 encoder for your computer and then show Audacity where it is located.

To obtain the necessary encoder search Google for **lame\_enc.dll** or download the encoder by [clicking here](#).

#### **Installing the encoder**

The first time you try to export an MP3 file, Audacity will ask you to locate your MP3 encoder. Locate the file indicated above. From then on, Audacity will not need to ask you again and you will be able to export MP3 files easily!

## 2.2 Installing and Using Media Coder software for conversion of video files to .FLV format



Media Coder is a free software tool for video format conversion. The software is available for download from here:

Windows 2000/XP/Vista: [Media Coder 0.6.1 installer](#) (.exe file).

The only video format compatible with GLO Maker is Flash Video (with file extensions **.flv** or **.FLV**). The following section describes the process of converting a file of any video format to the Flash Video format.

### Converting Videos to FLV with Media Coder

When Media Coder is started the interface in Figure 1 is presented. Clicking on the Add... button will allow you to select the file you want to convert. Once you have selected the file it will appear in the top left area; also, the *Output Folder* setting (text field in the top of the interface) needs to be set to the location where the converted file will be stored.

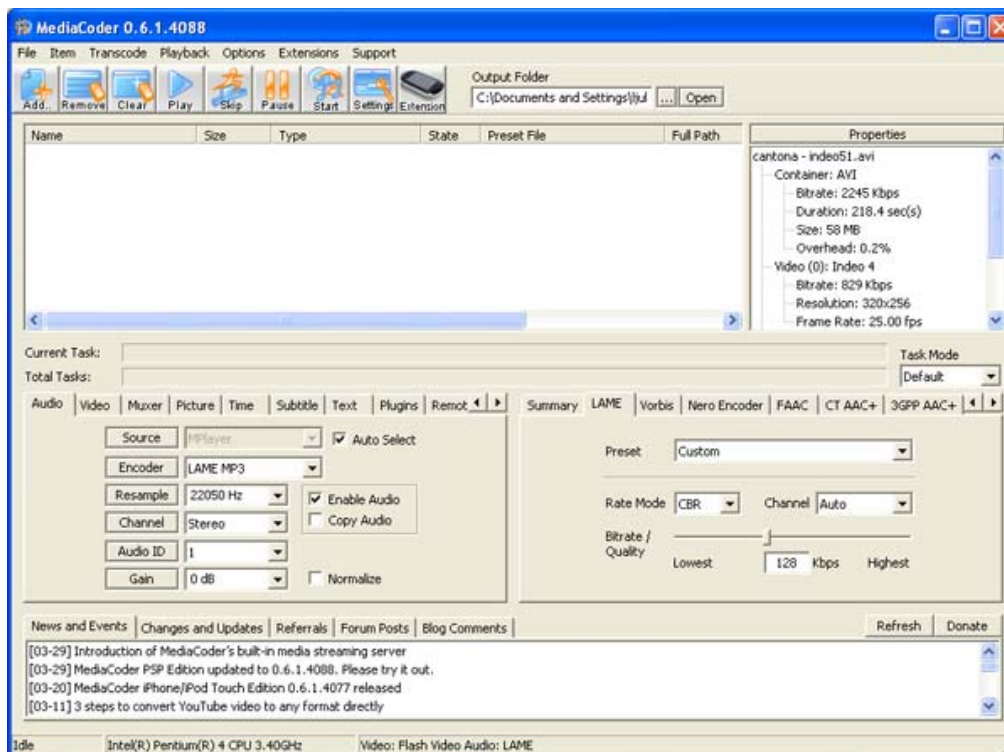


Figure 1 – Media Coder interface

With the source file specified the next step is to set Media Coder to convert the source file to a FLV file. We do this by clicking on the Extensions button – Figure 2 has this button highlighted.

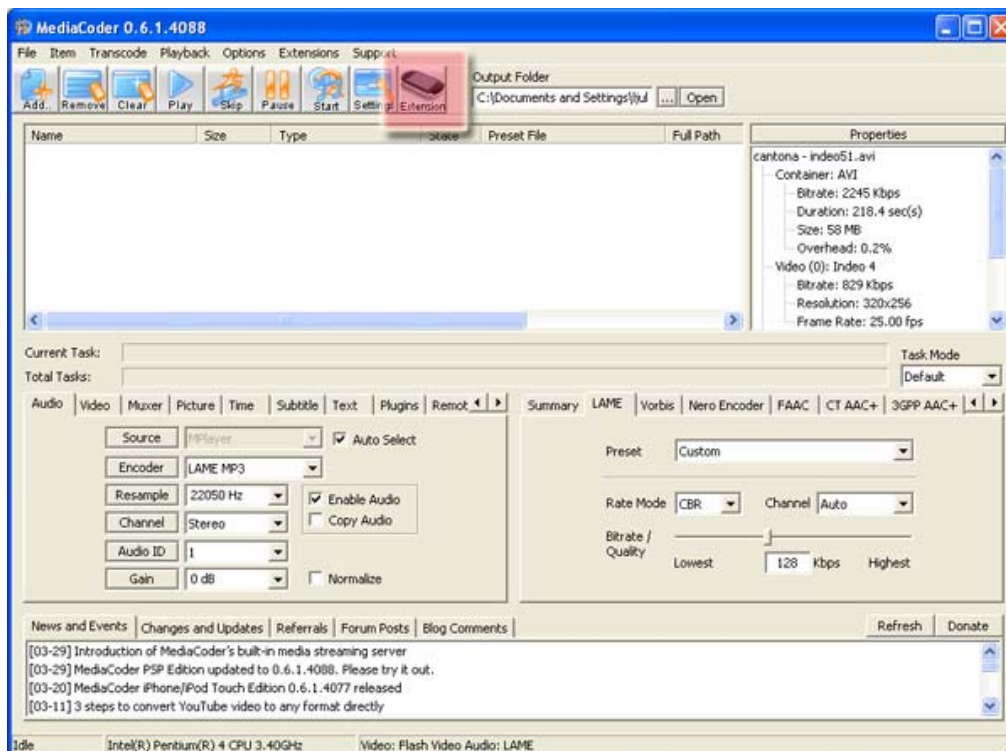


Figure 2 – Extensions button

Clicking on the *Extensions* button brings up the window - visual menu (Figure 3) depicting possible choices. The *Flash Video Maker* choice is highlighted in Figure 3.



Figure 3 – Icons menu

The settings in *MediaCoder Flash Video Maker* control panel should, in most cases, be left as is. The conversion process is started by clicking on the *Start Encoding* button – bottom right Figure 4.

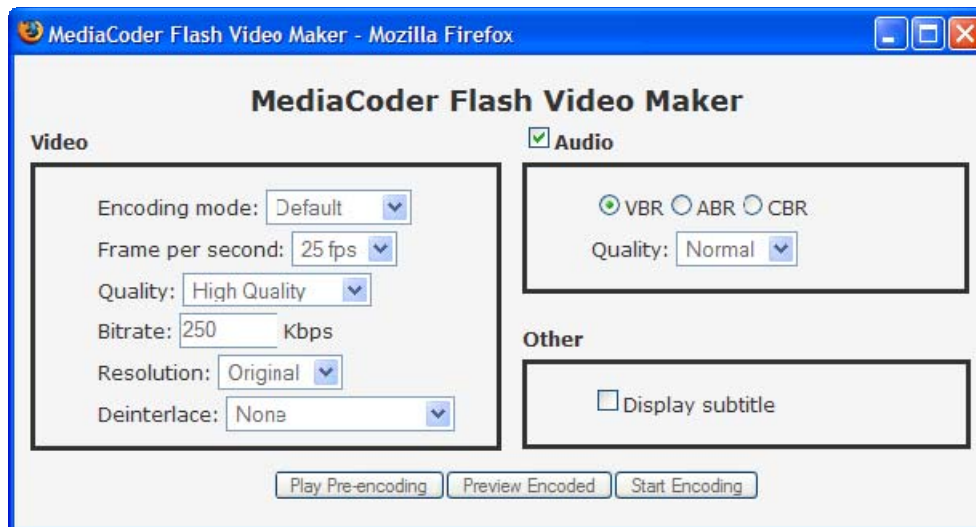


Figure 4 - The *MediaCoder Flash Video Maker* control panel

The duration of the conversion depends on the size of the file; progress can be monitored in the main interface, both in percentages and remaining time. After the conversion process is complete the converted file can be loaded into GLO Maker.

## Appendix 3 Different ways to present your GLO

### Create a 'short cut' on desk top

Go to the folder where the GLO file was saved, double click to go inside this folder. Inside the folder will be a file called: GLOPlayer.swf

Right click on this file, from the options that appear, choose 'Create a shortcut'. This will produce a 'Shortcut to GLOPlayer.swf' icon which you can drag to your desktop.



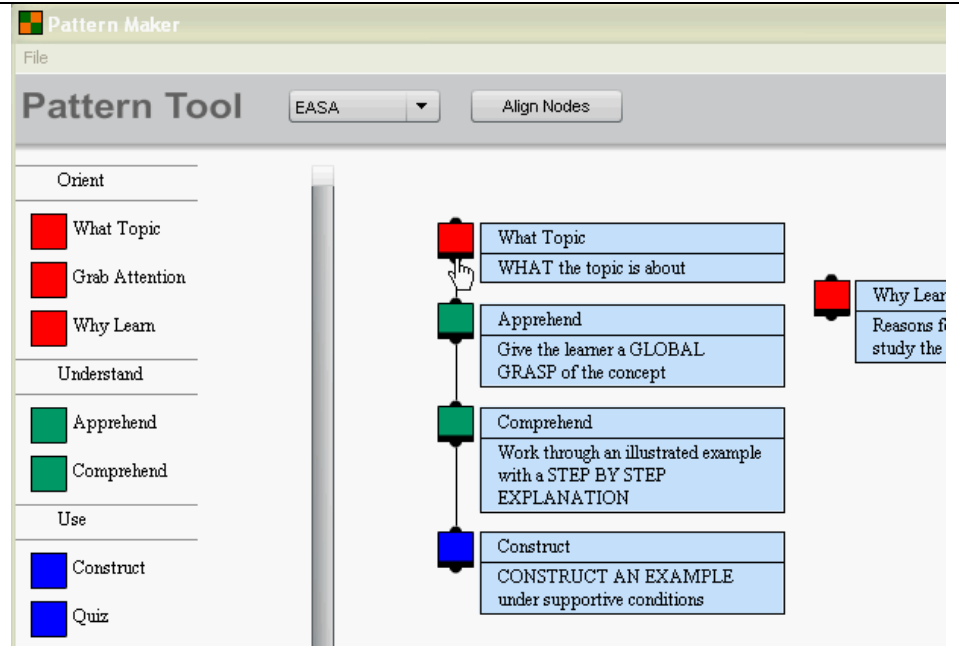
### Using a VLE

You can add your GLO to the learning materials provided for your course within a VLE. All files included in the completed version of the your GLO must be uploaded to the VLE environment, only the 'GLOPlayer' needs to be visible for students to click on, the other folder called 'Media' and 'temp' file can be hidden using the VLE's editing tools. The following example uses London Metropolitan's WebLearn facility (which is provided by Blackboard).

The screenshot shows the WebLearn Learning & Teaching interface. The header includes the logo for London Metropolitan University and the text 'WebLearn Learning & Teaching'. The navigation bar has 'Build', 'Teach', and 'Student View' tabs. The main content area displays a slide titled 'The Graduate Centre' with a text box and an image of a building. The footer shows 'The Graduate Centre slide 2 of 5' and navigation buttons for 'Back', 'Rewind', and 'Next'.

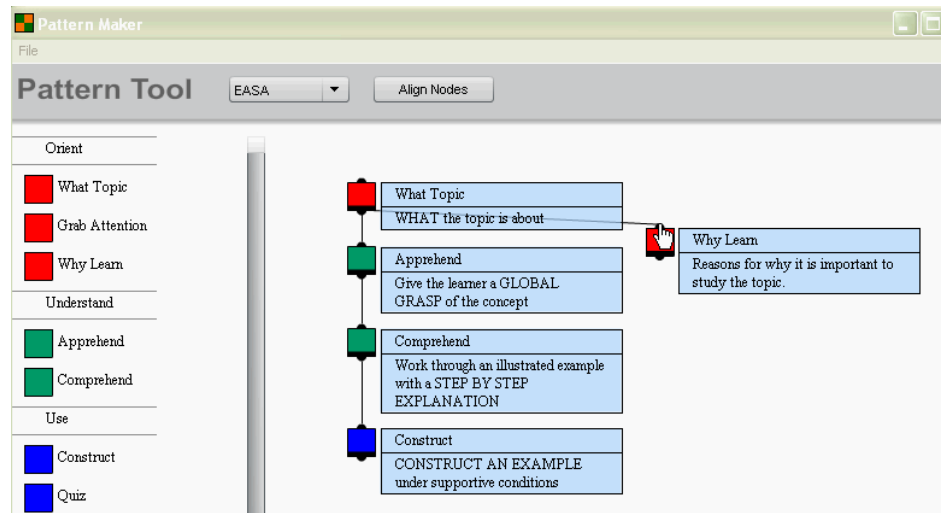


Click on the black area of the 'What Topic' node and start to drag. This should display a connection line.

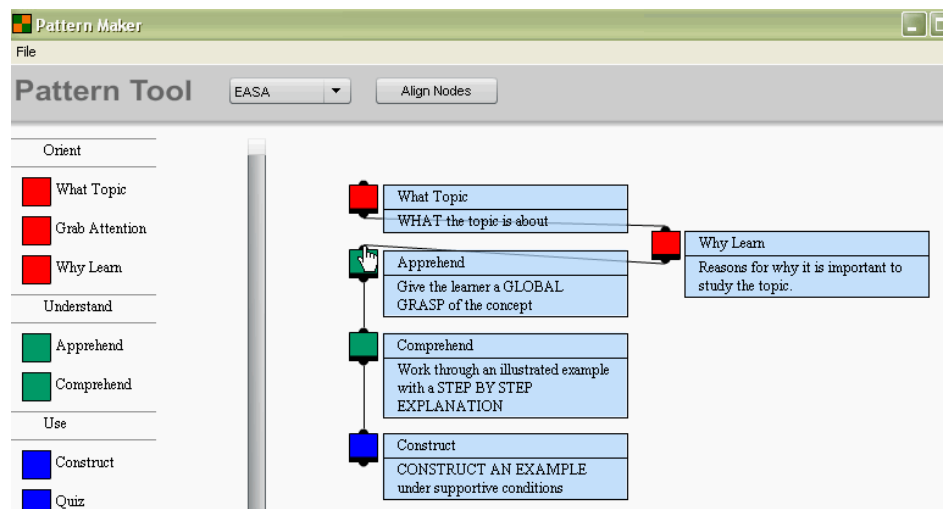


Drag the connection line over to the 'Why Learn' node and release.

Now connect the 'Why Learn' node to the 'Apprehend' node. By clicking on the black area on the 'Why Learn'.



The 'Why Learn' node has now been inserted into the 'pedagogical storyline'.



To tidy up the storyline layout, click on '**Align**

**Nodes'** button at the top.

Use the same instructions to add the 'Quiz' node at the end of the storyline.

This time join the 'Quiz' node by clicking on the black area of the 'Construct' node and dragging the connection line to the 'Quiz' node.

The image displays two screenshots of the 'Pattern Maker' software interface, specifically the 'Pattern Tool' window. The interface includes a menu bar with 'File', a dropdown menu set to 'EASA', and an 'Align Nodes' button. On the left, there is a legend with categories: 'Orient' (What Topic, Grab Attention, Why Learn), 'Understand' (Apprehend, Comprehend), and 'Use' (Construct, Quiz). The main area shows a vertical storyline of nodes connected by a line. Each node consists of a colored square icon and a text box. The nodes are: 'What Topic' (red), 'Why Learn' (red), 'Apprehend' (green), 'Comprehend' (green), 'Construct' (blue), and 'Quiz' (blue). The text boxes contain specific instructions for each node. In the top screenshot, the 'Align Nodes' button is highlighted with a mouse cursor. In the bottom screenshot, the 'Quiz' node is highlighted with a mouse cursor, and a small black square is visible on the 'Construct' node, indicating the connection point for the 'Quiz' node.

### Saving your Work

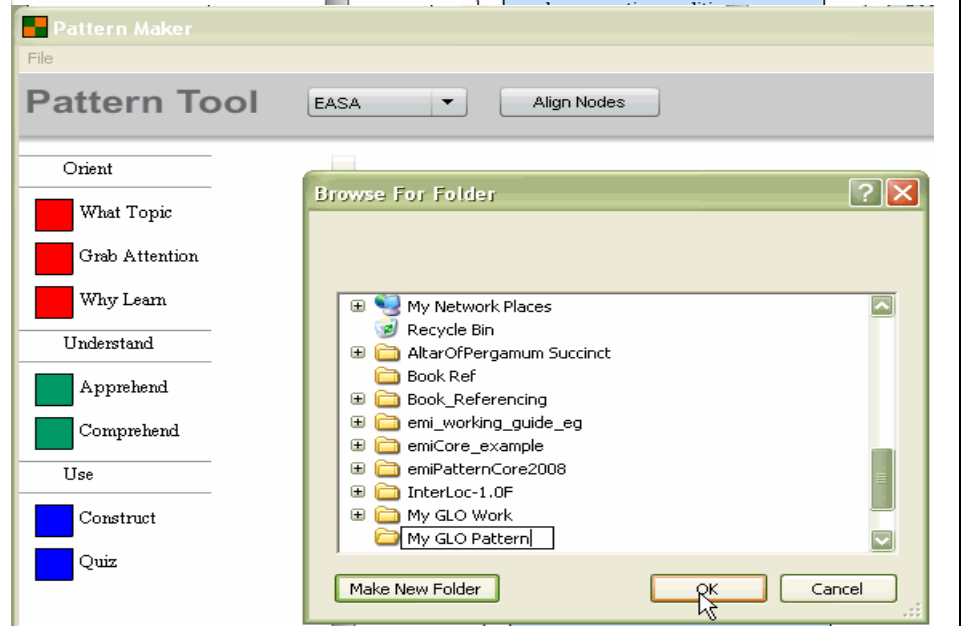
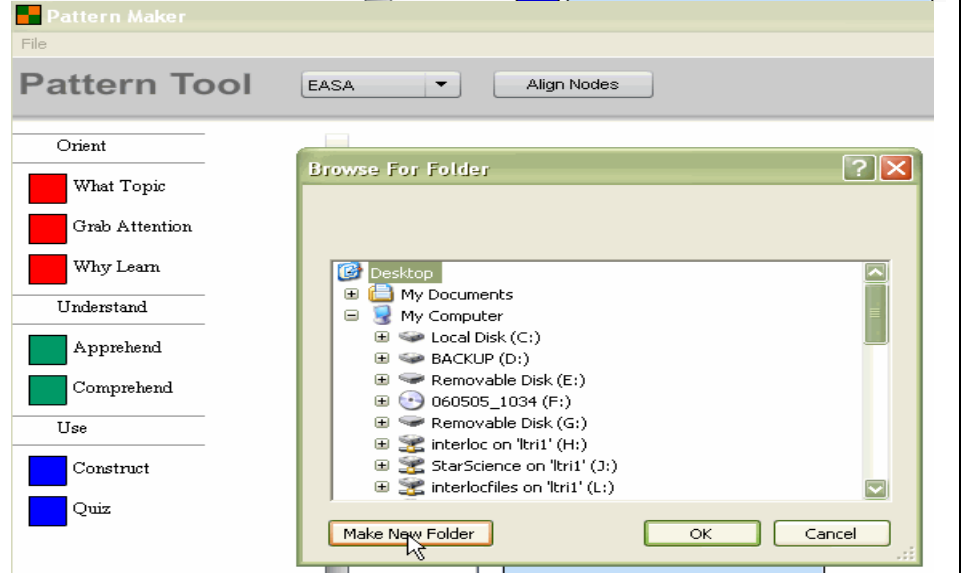
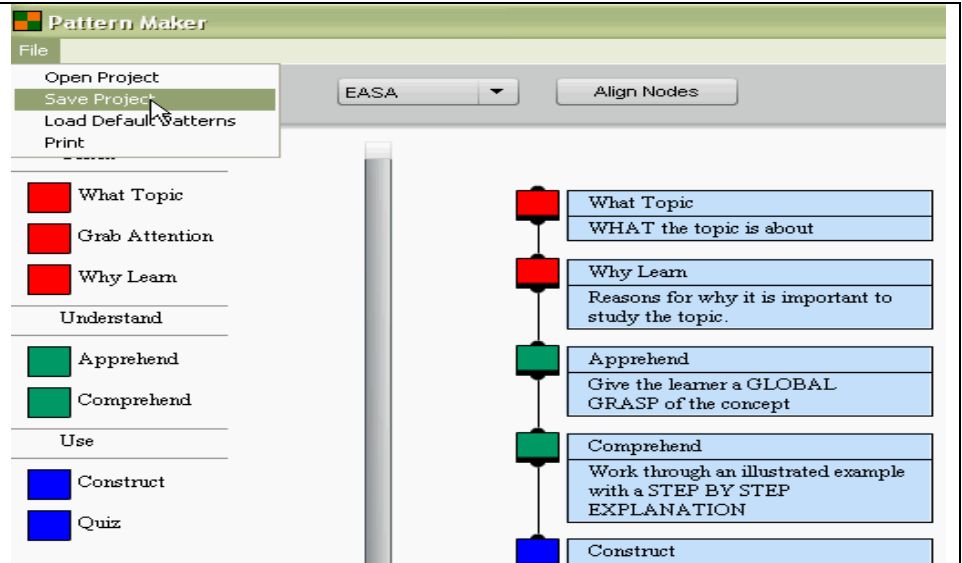
To save your pedagogical pattern (storyline), select **File** from main menu.

From drop down list select **Save Project**

The **Browse for Folder** pop up window will open.

Select 'Desktop' and click on the **Make New Folder** button.

Name the new folder: '**My GLO Pattern**' and click **OK**.



You will be asked if you wish to launch GLO Maker, select '**Cancel**' (on this occasion).

You can load the file into GLO Maker at any time to fill out the page layouts that have been automatically created.

