

LESSON D8_EN. HOW TO USE ELEARNING TOOLS AND TECHNOLOGIES. Authoring Tools for eLearning Courses, Part 2

Project: eEmployment

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Partner: Technische Universität München
Boltzmannstr. 3
85748 Garching b. München
Mail: matthias.baume@in.tum.de

Authors: Matthias Baume, M.MD.
Consultations: Mo. – Thu. 09.00 a.m. to 05:00 p.m.

After having learned this lesson you will be more familiar with the following topics:

- ☐ What are other important authoring tools for eLearning?
- ☐ Which combinations of tools can be used instead of an authoring tool?
- ☐ What is a help authoring tool?
- ☐ Basics for course building
- ☐ How to create courses, lessons and pages?

CONTENT OF THE LESSON

- 1 Other important Authoring Tools
 - 1.1 Authorware
 - 1.2 Lectora Publisher
 - 1.3 Quest
 - 1.4 ToolBook
 - 1.5 Trainersoft
 - 1.6 Combinations of tools
 - 1.7 Help authoring tools
- 2 The use of the Authoring Tools for eLearning
 - Courses
 - 2.1 Basics for course building
 - 2.2 Creating courses
 - 2.3 Creating lessons
 - 2.4 Creating pages

LEARNING OBJECTIVES:

After having learned this lesson you will have accomplished the ability to:

- ☐ Name different Authoring Tools
- ☐ Know combinations of tools to use instead of an authoring tool
- ☐ What to use a help authoring tool for
- ☐ Know how to use Authoring tools to build an eLearning course

1. Other important Authoring Tools

Authoring tools have been developed to simplify the authoring process for eLearning courses. Normally authoring tools work together with media editors and other tools.

Overview of tasks for authoring tools:

- Creation of pages
- Addition of text, images, sounds and other media
- Organization of pages and lessons for the access of the learner
- Creation and organization of tests and feedback
- Scorekeeping and reporting

The following pages give insight into the different authoring tools available.

1.1. Authorware

Here you see a part of the user interface of Macromedia Authorware 7

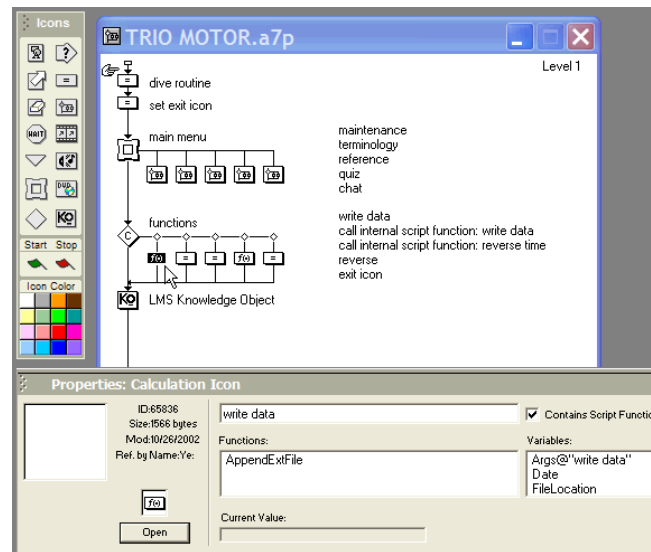


Figure 1: User interface of Macromedia Authorware 7
(Image from <http://www.macromedia.com>)

With Authorware you can develop courses that connect to Learning Management Systems through standards like AICC or SCORM.

AICC (Aviation Industry Computer-Based Training Committee) is an international association of technology-based training professionals that develops training guidelines for the aviation industry. In this context AICC is also developing standards for interoperability of computer-based and computer-managed trainings.

For more detailed information please follow the internet link:

<http://www.aicc.org>

SCORM (Shareable Content Object Reference Model) is an XML-based framework to define and access information about learning objects. The idea is to easily share these learning objects among different learning management systems (LMSs).

For more information see:

<http://www.adlnet.org/scorm/index.cfm>

In Authorware you can use special wizards to develop knowledge objects (Figure 2)

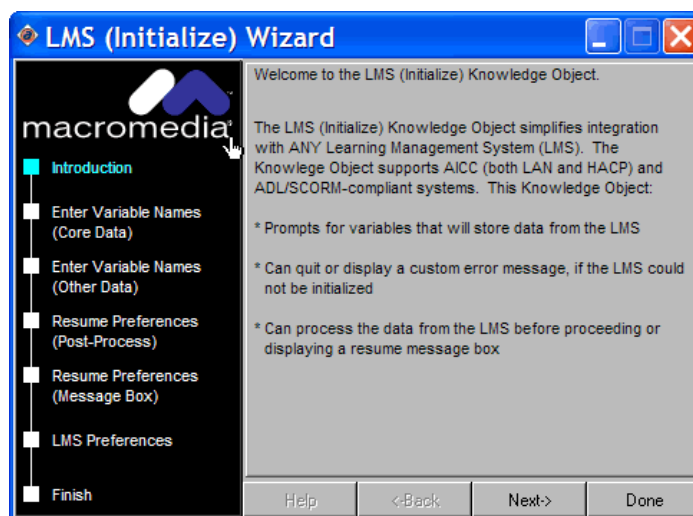


Figure 2: wizard to develop learning objects for a LMS
(Image from <http://www.macromedia.com>)

You can also add narrations, music or streaming mp3 files for audio-visual eLearning

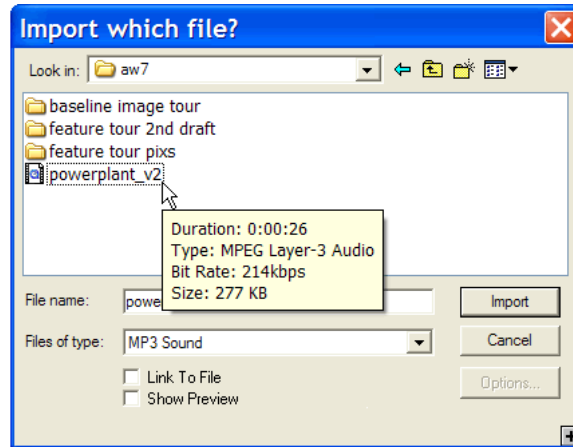


Figure 3: Import mask for media files in Macromedia Authorware
(Image from <http://www.macromedia.com>)

For more information about Macromedia Authorware see:
<http://www.macromedia.com/software/authorware/>

1.2. Lectora 2006

Lectora 2006 is another very powerful authoring tool. Without any programming knowledge you can develop different types of learning modules such as web-ready dynamic HTML, CD, single file .exe and others. Lectora has a user-friendly interface and an internal content management system for easy course creation.

Other features are:

- Single click publishing
- Easy creation of review questions and complete tests
- Automated tools for more speed, efficiency and accuracy in the course authoring process

(See also Lectora description: <http://www.lectora.com/>)

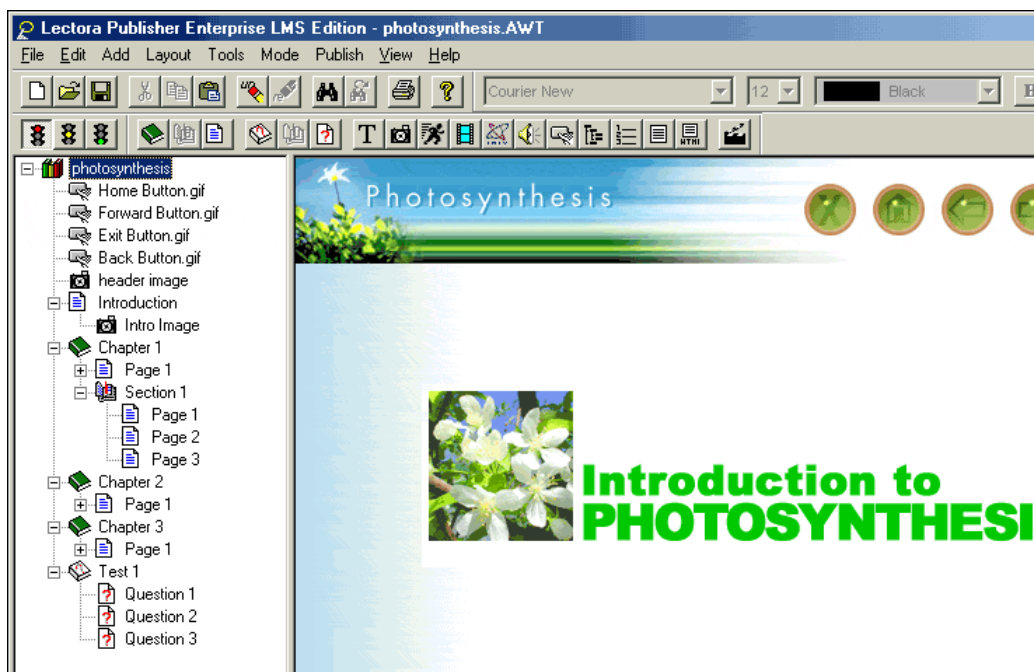


Figure 4: Lectora Publisher by Trivantis
(Image from <http://www.trivantis.com>)

1.3. Quest

Quest™ 7.0 is a powerful object-oriented authoring tool for both novice and expert training developers. You can use Quest for creating interactive courseware that can be delivered via Web, LAN or CD-ROM.

Quest has a frame-based development environment.

Interesting Quest Features are:

- WYSIWYG (What you see is what you get) development environment
- Project view and thumbnail view of the course
- Quest 7.0 supports AICC
- ActiveX support
- Master resource list that shows and controls the source directories and folders with your media files

For more information see also:

<http://www.professional-learning.com/quest.htm>

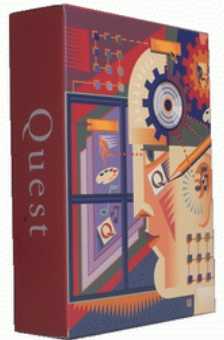


Figure 5: Authoring Software Quest by Mentergy
(Image from <http://www.professional-learning.com/quest.htm>)

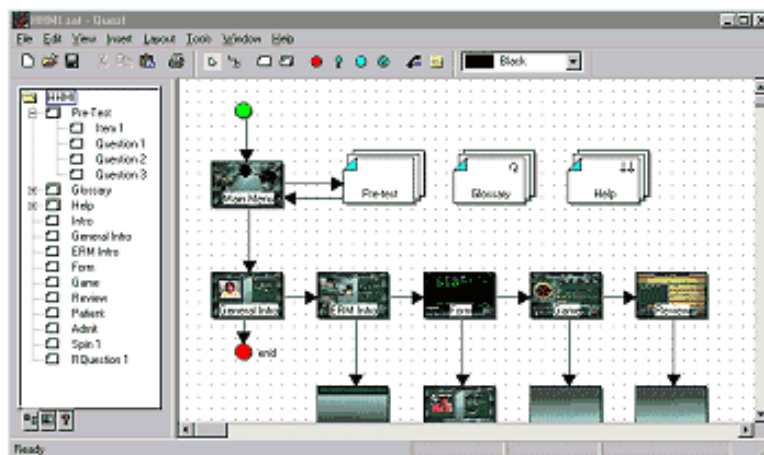


Figure 6: Quest User Interface
(Image from <http://www.professional-learning.com/quest.htm>)

1.4. ToolBook

Another interesting and very well known authoring tool is ToolBook by Click2Learn.

Special features of ToolBook are:

- The intuitive browsing environment and drag-and-drop capabilities
- The Actions Editor is a visual programming tool in ToolBook II Instructor.
- Distribution of applications in a variety of formats
- AICC and SCORM ready
- Ability to use third-party ActiveX controls and DLLs

For more information see the detailed description about Toolbook:

http://www.osc.edu/education/webed/Tools/archive/2001_01.htm

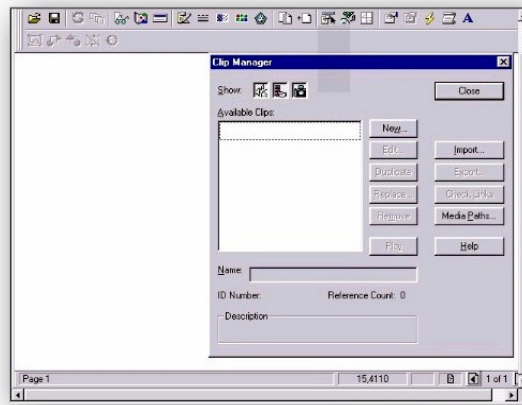


Figure 7: User Interface Toolbook Clip Manager
(Image from http://www.osc.edu/education/webbed/Tools/archive/2001_01.htm)

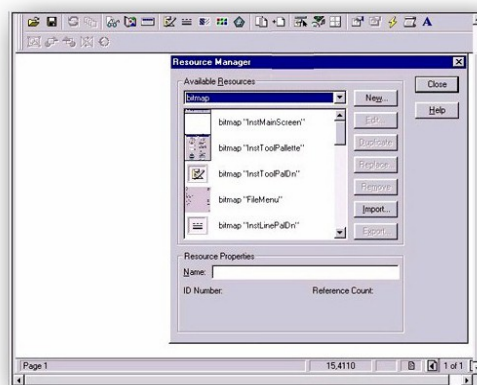


Figure 8: User interface of ToolBook Resource Manager
(Image from http://www.osc.edu/education/webbed/Tools/archive/2001_01.htm)

1.5. Trainersoft

The authoring tool Trainersoft from Omniplex is powerful software to develop eLearning content.

Features of Trainersoft are:

- Numerous templates
- Advanced testing and learner performance tracking and reporting
- Course Wizards
- Import of content directly from applications such as Microsoft Word and PowerPoint

For more information follow the link:

<http://www.omniplex.ltd.uk/infouk.asp?prodid=2138736421>

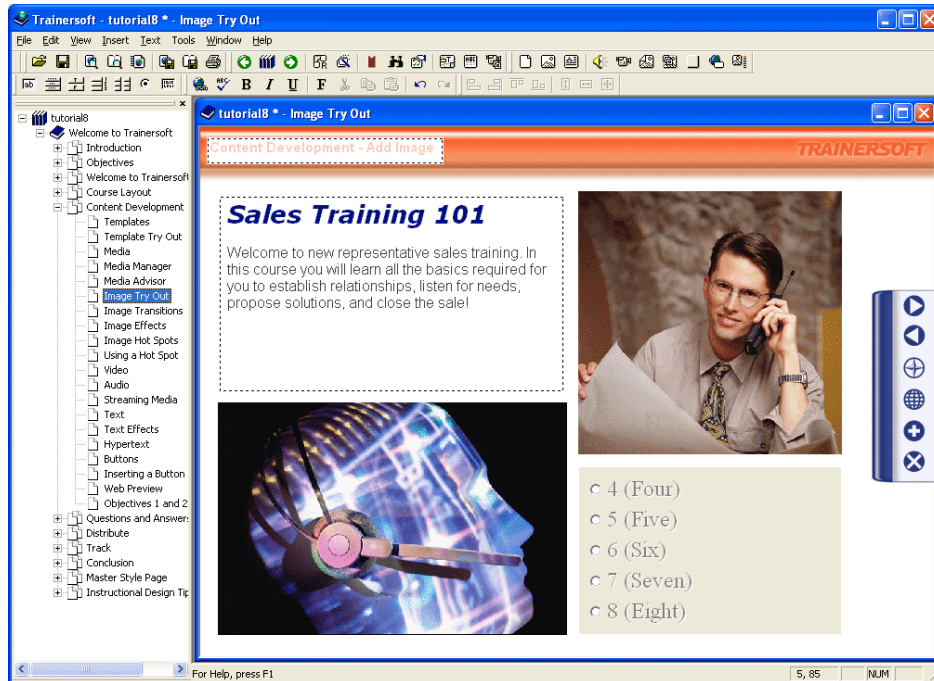


Figure 9: Trainersoft by Omnplex

(Image from <http://www.omnplex.ltd.uk/infouk.asp?prodid=2138736421>)

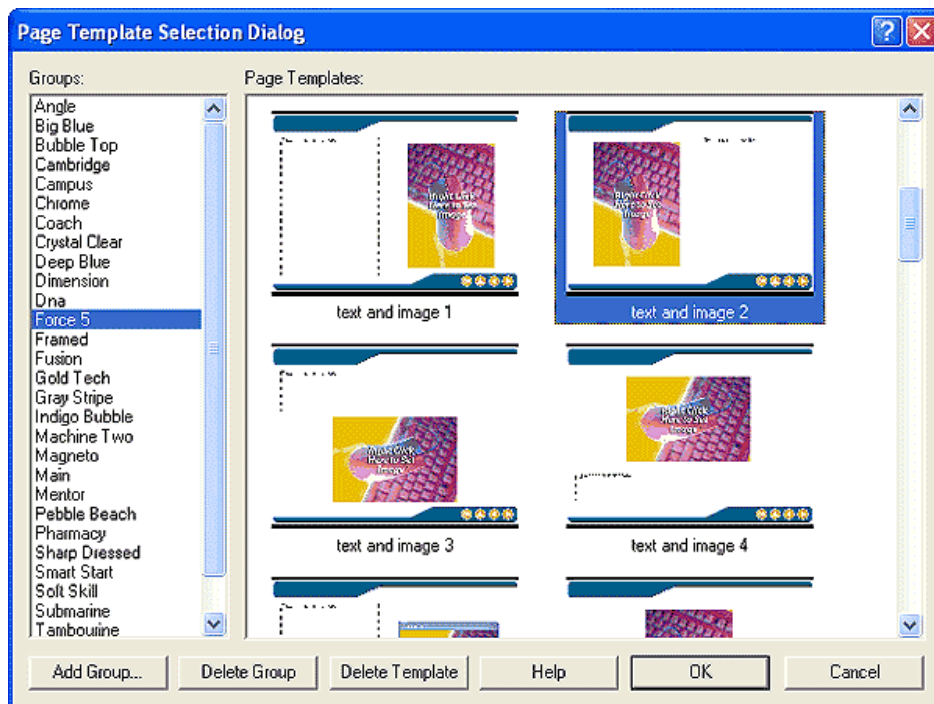


Figure 10: Trainersoft Template Selection Dialog

(Image from <http://www.omnplex.ltd.uk/infouk.asp?prodid=2138736421>)

1.6. Combinations of tools

Instead of using a typical authoring tool it is also possible to use a combination of tools of other categories.

Here you find a list of possible applications to combine

Web site authoring tool	Tool for creating a test
- Macromedia Dreamweaver (www.macromedia.com)	- QuestionMark Perception (www.questionmark.com)
- Microsoft Frontpage (www.microsoft.com)	- Hot Potatoes (www.halfbakedsoftware.com)

<ul style="list-style-type: none"> - Adobe GoLive (www.adobe.com) - NetObjects Fusion (www.netobjects.com) 	<ul style="list-style-type: none"> - Quiz Rocket (www.learningware.com) - Test Generator (http://testshop.com) - CourseBuilder (for Dreamweaver) (www.macromedia.com)
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Figure 11: applications for a combination of eLearning tools

1.7. Help authoring tools

Help authoring tools are specific applications for creating help files.

Features for the development of eLearning content:

- Possibility to embed eLearning into a software product
- Easy creation of help documents
- Organisation of rich text documents and tutorials

The following tools are examples for help authoring tools:

- RoboHelp
(www.ehelp.com)
- AuthorIT
(www.authorIT.com)
- Doc-to-Help
(www.componentone.com)

2. The use of the Authoring Tools for eLearning Courses

Using a specific authoring tool requires a lot of knowledge about the eLearning course you are interested to create. The following aspects give you an overview about what you have to know before using an authoring tool.

2.1. Basics for course building

Types of eLearning

At first you should think about what types of eLearning courses you like to build. Do you want to build a tutorial with text in the most parts or a complex learning simulation?

Knowledge of your team

For the creation of an eLearning course special knowledge is required. If your team does not have this knowledge it will be very problematic to build an eLearning module.

Target Browser

You can't use every authoring tool with every browser. For example some of the authoring tools can only be used with the Microsoft Internet Explorer, others are optimized for Netscape.

Outsourcing parts of the course development

If you plan to outsource parts of the development process, maybe you are not interested in features of the authoring tool you do not need.

LMS or LCMS

It is possible that the organization you create the eLearning course for already uses a learning management system or learning content management system. In this case you should use a course building software, which supports the course type and file formats of the existing learning platform.

2.2. Creating courses

Here are some aspects you have to think about when you create an eLearning course:

File formats:

- Some tools publish a website in HTML-files other tools have special file formats.
- The file format is very important if you want to change the authoring tool in the future.

Content optimized for Web, CD or both

- Some authoring tools optimize their end products only for the Web.
- If you need optimized content also for the production of a CD-ROM you need to choose an authoring tool that also supports CD-ROM production.

Proprietary Player

- If the authoring tool you have chosen only works with a proprietary player, it is possible that a part of your users doesn't have this player installed.
- Maybe the player only supports one special operating system.

Navigation aids

- Some tools can create navigation bars automatically.
- Especially for the target group of eEmployment an optimized navigation through the lesson would be an advantage.

2.3. Creating lessons

If you are creating lessons for eLearning content some aspects have to be taken into consideration:

Preexisting content

- Some authoring tools give the possibility to produce pages from existing file formats like HTML, Microsoft Word or PowerPoint.
- If you can use existing file formats creating pages may be much more efficiently than producing the pages totally new.

Course structure

- There are authoring tools that let the author create any kind of page in the content structure.
- Other tools let the author create on pages in a given hierarchical order.

Rearranging the content

- If the author wants to create a new structure with existing content it is often necessary to reorganize and restructure all the pages.
- Some tools make it easy to do so by drag and drop.

2.4. Creating pages

If you are creating pages for eLearning content some aspects have to be taken into consideration:

Templates

- Some authoring tools give the possibility to use special templates to create new pages.
- Other tools present special wizards to help the author manage the authoring process fast and easy

Visual interface

- To create pages in many authoring tools you can use a lot of drag-and-drop behaviours.
- Moreover it is easier to produce pages if you don't have to constantly change the editing modes.

Use of external tools

- Sometimes it is easier to produce media files in an external editor first and then import them directly into the authoring tool.
- For this case it is very helpful if the authoring tool supports special file formats like Word format or Adobe Photoshop format.

Key Point Summary Conclusions and Recommendations

1. Other important authoring tools are

- Authorware
- Lectora Publisher
- Quest
- Toolbook

- Trainersoft
- 2. Instead of using a typical authoring tool it is also possible to use a combination of tools of other categories
- 3. Help authoring tools are specific applications for creating help files.
- 4. For course building the following aspects are important:
 - Types of eLearning
 - Knowledge of you team
 - Target Browser
 - Outsourcing parts of the course development
 - LMS or LCMS
- 5. For creating courses you should think about the following aspects
 - File formats:
 - Content optimized for Web, CD or both
 - Proprietary Player
 - Navigation aids
- 6. For creating lessons you should think about the following aspects
 - Preexisting content
 - Course structure
 - Rearranging the content
- 7. For creating pages you should think about the following aspects
 - Templates
 - Visual interface
 - Use of external tools

Study Guide

ESSENTIAL QUESTIONS FOR THE VERIFICATION OF THE ACCOMPLISHED KNOWLEDGE

1. What are other important authoring tools for eLearning?
2. Which combinations of tools can be used instead of an authoring tool?
3. What is a help authoring tool?
4. What basics of course building do you have to think about?
5. How do you create courses, lessons and pages?

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- [11] **Macromedia Dreamweaver:** <http://www.macromedia.com>
- [12] **Microsoft Frontpage:** <http://www.microsoft.com>
- [13] **Adobe GoLive:** <http://www.adobe.com>
- [14] **NetObjects Fusion:** <http://www.netobjects.com>
- [15] **QuestionMark Perception:** <http://www.questionmark.com>
- [16] **Hot Potatoes:** <http://www.halfbakedsoftware.com>
- [17] **Quiz Rocket:** <http://www.learningware.com>
- [18] **Test Generator:** <http://testshop.com>
- [19] **CourseBuilder (for Dreamweaver):** <http://www.macromedia.com>
- [20] **RoboHelp:** <http://www.ehelp.com>
- [21] **AuthorIT:** <http://www.authorIT.com>
- [22] **Doc-to-Help:** <http://www.componentone.com>

RESPONSES TO THE QUESTIONS

1. Other important authoring tools for eLearning are for example:
 - Macromedia Authorware
 - Lectora
 - Quest
2. In many cases the combination of tools can substitute an authoring tool
 - A Web authoring tool e.g. Macromedia Dreamweaver
 - A Test Generator e.g. Hot Potatoes
3. Help authoring tools are specific software for creating help files.
4.
 - Think about what types of eLearning courses you want to build.

- Think about the needed special knowledge of your team
- Think about the target browser
- Think about outsourcing parts of the course development.
- Think about support for LMS or LCMS

5.

- a.) For creating courses you should think about the following aspects
 - File formats:
 - Content optimized for Web, CD or both
 - Proprietary Player
 - Navigation aids
- b.) For creating lessons you should think about the following aspects
 - Preexisting content
 - Course structure
 - Rearranging the content
- c.) For creating pages you should think about the following aspects
 - Templates
 - Visual interface
 - Use of external tools