

ILT to eLearning Conversion Guide
**Documenting the Methodology for Repurposing an
Instructor-Led Workshop for eLearning Delivery**

Donnamaie E. White, Ph.D.

WhitePubs[®]

eLearning Conversion from Instructor-Led Training

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Introduction

eLearning has spawned many forms, a myriad of software packages and as many ways to create eLearning and there are people creating it.

This document records one company's experience in converting a technical instructor-led training class into a full-service eLearning course.

1.1 Full Service is

By full service we mean:

- Main page
- Main page audio
- Notes page
- Notes page audio
- Animation
- Other graphics
- Glossary actively linked
- Chat Room
- Pop-ups

You get the picture

1.2 Trying out full-service LMS

The course was developed after a simpler course was tried. This establish some of the pit-falls and a basic procedure.

The LMS (the company has since gone out of business) was a new one and had all the bells and whistles everyone was discussing at the time.

The cost in the long run was prohibitive for the ROI.

Companies need rapid turn-around, easily updated training and, unfortunately, many have dropped back to page-turners – plain vanilla PowerPoint presentations.

1.3 In the end, it is the process... not the software

Exceptions abound. To just name two of them:

- Microsoft
- Adobe

These companies have a very good handle on modularity and the combination of audio, visual and print that today's student has been demanding from the beginning.

What is documented on the following pages is implementation-independent.

Launching a training class can be considered no less an event that christening an ocean liner. Everyone it seems needs to have a say.

2 eLearning Conversion from Instructor-Led Training

2.1 Low-End Conversion

- Cheaper (less effective) to do:
 - Page Flip – Just the slides
 - Talking head – slides plus taped instructor
 - Recorded session – pretaped – instructor plus a class
- Call-in Slide Show
 - Phone connect to the instructor – slides on screen
- Live Video Conferencing
 - Allows interaction
- Last two require student to print out slides
- Schedules depend on instructor
- Some require video conference equipment, speaker phones, a good large monitor
- Cheaper to do
- No TFU – no way to measure success

2.2 High-End Conversion

- Full service provides canned (recorded) lecture material – audio and visual
- Notes for each slide
- TFU – test for understanding at regular intervals
- Pop-up glossary terms
- FAQs
- Remedial possibilities for wrong quiz answers
- Reinforcement on correct quiz answers
- Some animation
- Final product is stand-alone
- Instructor does not have to be available
- Chat room / BBoard/email contact for support, Q&A
- Self-paced (Learning system tracks progress)
- Any location
- Student's convenience

2.3 How This Was Created

- These notes came from about 30 years of tracking computer-assisted instruction (including an attempted PhD Thesis)
- These notes were refined by performing a conversion of a high-tech lecture-lab training program into a full service eLearning experience
- It took the dot.com disaster to stop more companies from investing in this – tragic
- The Internet however --- leads to some other interesting low-cost techniques

3 Documenting the Methodology for Repurposing an Instructor-Led Workshop for eLearning Delivery

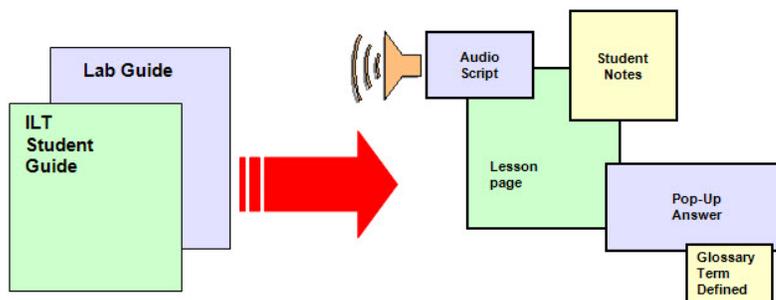
3.1 Slide 8: Introduction

- Introduction
- Conversion to Lesson-Orientation
- Labs, Glossary and FAQs
- Audio Script – Structure Document
- Review Process

3.1.1 Slide 9: eLearning Conversion

- Instructor–Led Training Workshop to full-service eLearning
- Includes a Learning System (3rd Party)
- Completely self-directed training
- Auto-corrected Quizzes with reinforcements
- Audio and script
- Glossary, FAQs
- Labs

3.1.2 Slide 10: What This Document Is



- The process developed for ILT course conversion
- Methodology developed for eLearning vendors
- Multi-Media

The eLearning course consists of files that represent:

- The lesson page itself (.html)
- Any art (.gif, .jpg file) or animation (.swf file) belonging to the page
- The audio script (.html)
- The recorded audio (.wav)
- The student notes (.html)

- Any art for the student notes
- A pop-page for answer to any question (optional) (.html)
- Any art for the pop-up page
- All glossary terms auto-hot-linked to glossary

Each page can also access the FAQ file

3.1.3 Slide 11: Objectives for this Document

- Provide a guideline for consistency in quality among eLearning courses
- Provide a Project Guide
- Provide the communication and interface steps
- Provide customer interface recommendations
- Provide documentation of the Project Path

3.1.4 Slide 12: Audience

- Detailed documentation for:
 - Those converting ILT courses to eLearning
 - eLearning Project Coordinator
- Helpful information for:
 - Managers working with:
 - Lead developers
 - Subject matter experts (source authors)

3.2 Slide 13: Step 1: Development Request Form

- Request for conversion received/approved by the training department management team:
 - Request is for repurposing of existing ILT workshop to eLearning format
 - Triggered by approval of a Needs Identification Document
- Document must specify level of conversion
 - Full eLearning – or page-turner (eBook)

3.3 Slide 14: Step 2a: Design Document

- Design document received and approved by the management team:
 - Design Document states how to modify the ILT workshop to eLearning
 - Created by the LD
- Specifies:
 - Audience
 - Deliverables
 - Measurable Objectives
 - Etc.

3.4 Slide 15: Step 2b: Identify the Modules or Units

- Lead Developer and eLearning Project Coordinator:
 - Divide workshop into chosen number of modules or units
 - Title workshop modules/units
 - Identify modules/units by:
 - Title
 - Starting Unit #
- Module will be dropped and only Unit will be referenced from here forward

A workshop is a collection of modules, which are in turn a collection of lessons

A workshop in eLearning is also considered to be a collection of units (as in training units) which in turn are a collection of lessons

Whichever term you are used to, Units will be used going forward,

3.5 Slide 16: Step 2c: Course Descriptions

- Lead Developer and eLearning Project Coordinator:
 - Create one course description for the external web for each workshop
 - Use the sample outline developed
 - Identify the different prerequisites for each workshop
 - Include the link to Minimum System Requirements:
 - Students need earphones, audio software
 - Students need OS, RAM, Hard Drive space
 - Same as any software package

3.5.1 Slide 17: Outline for Unit Description

- Title of the Unit
- Duration (Average length of time to complete the material) in days
- Price if applicable (can you buy pieces?)
- Unit Overview
- Free Demo Paragraph (same for all workshops)
- Workshop Unit x Registration (use standard .gif and link)
- Unit x Objectives (a top-level bullet list of lesson objectives)
- Audience Profile
- Unit x Prerequisites (include preceding unit (x-1) in the list)
- Unit x Outline (short list (i.e. Unit Titles))
- Unit x Detailed Outline (Lesson titles and Lab list)
- Labs (same for all workshops - downloading the labs)
- Software Tools Used (include the latest release version of the software for which this course has been tested; add disclaimer that using a more recent release may lead to lab result differences)

Since this will be advertised on the web – the above are some of the things that need to be defined.

Cover all cases such as mismatch of software versions, operating systems differences, For the labs, cover exactly what set-up is required. If there are options, list them. Always include a disclaimer – if they do not meet your stated requirements ----- there is no guarantee that anything will function.

3.5.2 Slide 18: eLearning Course Template

- A new web template for eLearning workshops (full class or units) needs to be developed and implemented
 - Existing template for ILT training does not fit eLearning
 - Existing template for ILT training does not fit modular eLearning

3.6 Slide 19: Step 3: Kick-Off Conversion Meeting

- Assemble the team (see the next slide)
- Set expectations:
 - Agreed-on contract will set the target completion date
 - Vendor will set the due dates on transfer items based on an agreed-on schedule:
 - Schedules involve LD-SME time, eLearning Project Coordinator time, team reviews and post-mortems and must have by-in from all parties before the project begins
 - Schedules may be aggressive
 - Marketing - collateral alert
 - Registration - SAP
 - Part and Kit Numbers
 - Web Pages

Note: the contract is set by the lead developer and the eLearning team along with CES Marketing and the eLearning vendor.

Once that contract is in place, the expectation is that it will be followed to prevent a schedule slip.

3.6.1 Slide 20: The Team

- The 3rd Party Team:
 - Account Rep
 - Project Manager
- The Team includes:
 - eLearning Manager
 - eLearning Project Coordinator
 - Marketing Manager
 - Registration, database, web update responsibilities
 - Training Director
 - LD-SME(s)
 - SMEs REM
- **Note:** The BU may also be invited to participate

Anyone who has a vested interest in the training and anyone who is part of the promotional team (since there is a charge for taking the training) must be involved. These people are not the course creators, but will set the schedules.

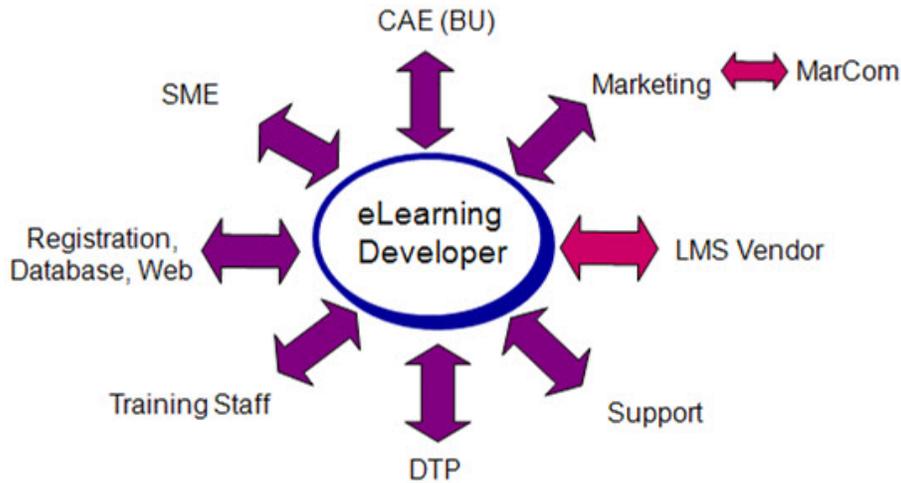
Lead developers (LD) and subject matter experts must have time scheduled.

All parties must agree on who is doing what and when.

Same as any business undertaking.

DO NOT treat this as a casual project. Microsoft Project is a useful tool for tracking this.

3.6.2 Slide 21: Communication



Everybody!

Note: The BU CAE should have already reviewed the released ILT version of the workshop

-eLearning conversion does not change the content of a released workshop.

-Sample List:

-Subject Matter Expert (SME)

-Customer or Filed Applications Engineer (May be part of the Business Unit)

-Customer Service (or whom ever tracks typical questions from customers)

-Accounting people who handle registration

-People responsible for the External Web (advertising, on-line registration)

-The training Staff responsible to maintain and perform ILT (second-line experts)

-Desktop Processing (editor; technical publications)

-Support Team (IT; for lab machines; software licenses; host server for lab and PDF downloads)

-The Learning System Vendor and their teams

-Marketing; also MarCom within marketing

-Project Lead for the Course Conversion

-Person(s) selected to maintain bulletin board (if any) and chat room monitoring (if any)

- There may be others depending upon the workshop and the departments involved

3.6.3 Slide 22: Registration Issues

- Pull-downs on appropriate web pages
 - What title
 - What price
 - Duration (Average length of time to complete material)
 - Other items as needed to finish the web page specification
- Links to Registration System
 - Payment
 - Login-Password issues
 - Confirmation Letter
- Coordinate with Vendor's accounting system

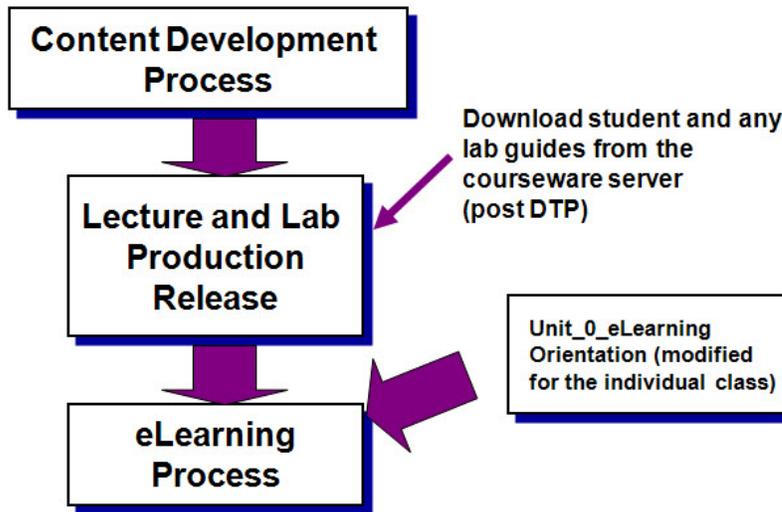
You may have the case where the learning vendor registers the student and then must handshake to the supplier's accounting system for lab approvals and other permission issues,

In most cases, the student can download a copy of the slides and the labs.

They need a password access to do this. The material may be on one of the servers – either the learning system's server or the corporate server.

In any event, accounting is involved.

3.7 Slide 23: Step 4: Process-eLearning Handoff



The assumption is made that the starting slides for eLearning come from the courseware server (a released workshop) that has been processed through DTP, signed off by all parties and released.

- An eLearning conversion does not require that the initial new class “90-day warranty” period is complete. (Shake down of a new class)

Unit 0 eLearning is a comprehensive **orientation section** that is only slightly modified for each specific workshop.

- Unit 0 provides the on-line user with download directions, support information and other information that the live-class student may find in other locations.
- Unit 0 also provides set-up and orientation to the operation of the eLearning workshop itself.
- Unit 0 eLearning is designed to be passed from course to course with a minimal number of edits to reduce conversion time when multiple classes are to be converted.
- Unit 0 is not part of the ILT

3.8 Slide 24: DTP – Desktop Publisher / Editor

- DTP reviews and works with the SME and eLearning Project Coordinator on all typos, misspellings, web color issues, and other items:
 - Audio scripts
 - Glossary entries
 - FAQs
 - Quizzes
 - Answer sheets
 - Pop-up slides
- *This is in addition to the ILT PPT and Lab Guide reviews done previously (prior to the ILT workshop release)*

Quality and Consistency Check

Large training groups have a top-level editor.

If not – appoint one different from the content developer (“second pair of eyes”)

You have spell-check – use it

You have grammar check – try to use it

3.9 Slide 25: Step 5: Review Web Pages

- Complete external web page specifications
 - 1 page per Workshop
 - All interconnections
- Complete review cycle of specifications

3.10 Slide 26: Step 6: Submit Web Course Descriptions

- Provide a course description to Marketing for the external web page
 - Lead time a minimum of 3 weeks prior to “live” date
- Once approved, provide the schedule as a “heads up” to Marketing:
 - The final schedule will be verified further along in the process
- Finalize the course description a minimum of six (6) weeks before the Alpha session of the training
- Course description goes “live” on the external web after the Alpha

These are suggested timings

3.10.1 Slide 27: Sample Course Description Format

```

<Workshop Title> (eLearning)
<workshop Sub Title>
Average Time to Complete: <n> days
eLearning: <price1>

>Index [what follows on this page]
  Overview      Prerequisites
  Registration  Workshop Outline
  Objectives    Tools Used
  Audience Profile

>Workshop Overview
Introductory Price-- <price1> until <date>. After <date> pricing increases to <price2>.
This eLearning workshop is self-paced and interactive. The Prerequisite Test will
ensure that you have the prerequisite knowledge of the subject matter.
  <Link to a pre-requisite knowledge test>

In this course, you will expand your basic skills which were introduced in the
  <previous class title if any>
  such as <skill list>.
In addition, you will be exposed <another topic>.
Finally, you will be introduced to some of the new features in upcoming releases
of the <company name> tools.

>Workshop Registration <click here to register>

>Measurable Objectives
At the end of this course, the student should be able to:
  <List of measurable objectives>

>Audience Profile
This course is intended for <who is this for>.

>Prerequisites
Take the <Prerequisite Test>
  <prerequisite class, if any>
  <skills required>

>Workshop Outline
  Introduction
  <unit Title List>
  Conclusion - Hot New Features and Products

>Tools Used
  <Software list>
  <Hardware required>
    
```

Rest is Similar to the ILT workshop

Example:

Number of hours to complete: 24 hours

Average time to complete: 3 days

Not to be confused with the length of time the login is active (90 days)

All the machine set-up and requirements are handled when the student jumps to the registration page

4 Slide 28: Conversion to Lesson-Orientation

- Introduction

- Conversion to Lesson-Orientation

- Labs, Glossary and FAQs

- Audio Script – Structure Document

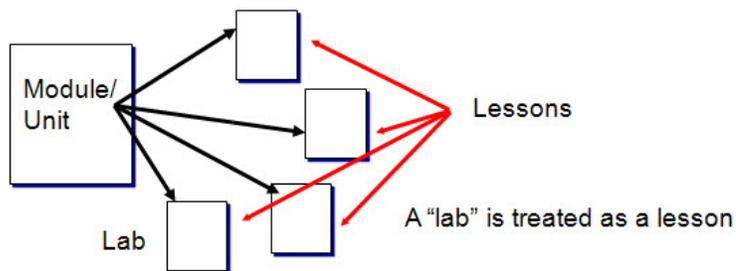
- Review Process

The previous Unit was focused on the management and details in actually offering an eLearning workshop over the web and interleaving it into the other offerings of a full-fledged training department.

This unit will look at the mechanics of converting Units (what are also called modules or chapters) into partitioned Lessons

4.1 Slide 29: Step 7: Breakup Units into Lesson Format

- ILT uses the Course Unit as a measure of modularity – Same as a unit
- Labs associated with Units (1 per, max)
- LMS eLearning workshops divide into same Units
- eLearning Units further divided into “Lessons”
- 25 Workshop Lesson Structure



The number of lessons per Units will vary with the material

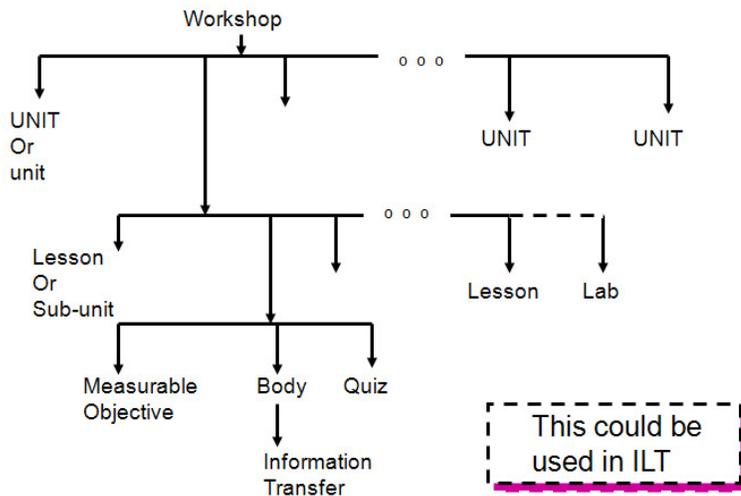
Some units have a lab with one or more tasks.

Not all Units have a lab

Note: eLearning conversion will not involve lab development

- the same labs will be used as have been released for ILT use

4.1.1 Slide 30: Workshop Lesson Structure



Labs and lessons may include a “quick quiz” at the end:

TFU = Test for Understanding

eLearning allows the computer to auto-grade the quiz and provide immediate feedback to the student

The LMS may allow a student to repeat a quiz – or not

This modularity and the TFU introduction can be re-applied back to the ILT version of the workshop

This is nothing more than applied ***Adult Learning Theory***

4.1.2 Slide 31: Workshop Units Defined

- An ILT workshop composed of "Units" of instruction
- Each unit in eLearning workshop handled as part of the main workshop
- Each Unit will be a top-level TOC (Dynamic Table of Contents) LHS (Left-Hand Side) entry on the LMS GUI

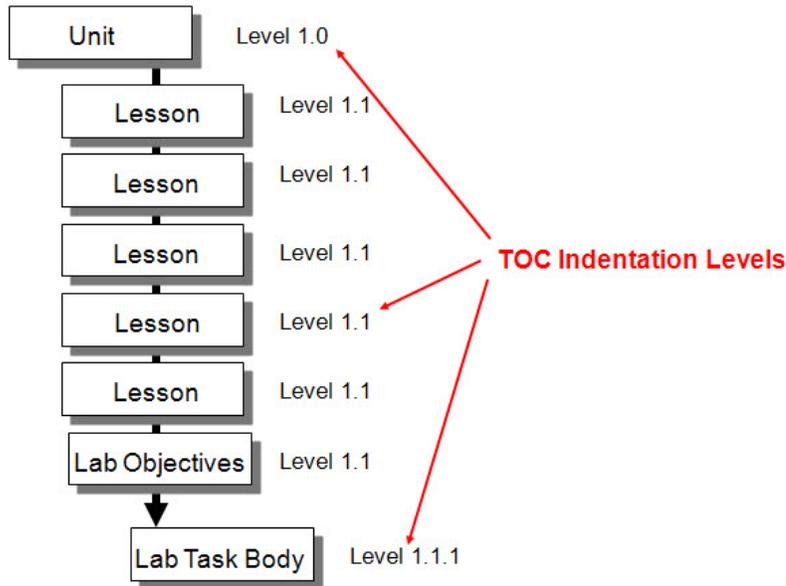
This means that an abbreviated TOC (restricted to the pages in the current Unit) is on the left side of the screen allowing students to jump around however, sometimes sequencing is important.

Unit 0 should stress:

- It is strongly recommended in the orientation instruction for the students that the courses or Units be taken in order for the maximum benefit.
- Quizzes within the courses or units and labs should be taken in order for maximum benefit.
 - With an LMS, quizzes may need to be taken in order (software requirement)
 - This is an on-going discussion in some cases

LMS = Learning Management System

4.1.3 Slide 32: Unit Graph



Sample structure.

- A **Unit** may have 1 - 7 **lessons**. 3 - 5 is optimum.
- The **Lab** is the proper TFU (test for understanding) for the content of all the lessons in a Unit.
- Longer labs should be broken up into smaller units called “tasks”.
- **Task titles** should appear in the LHS during the lab (Level 1.1.1).

4.1.4 Slide 33: Unit Structure

- Structure:
 - Title Page
 - Art showing Unit position in grouping using the ILT colorbar format
 - Level 1.0
- Lessons
 - 2-7 lessons per "Unit"
- Lab
- This could be used in ITL

The title page needs to have art or some type of diagram on it, otherwise it is just a line of small text. This holds true for all appendices title pages as well. (HTML translation cannot create a font size of 72.)

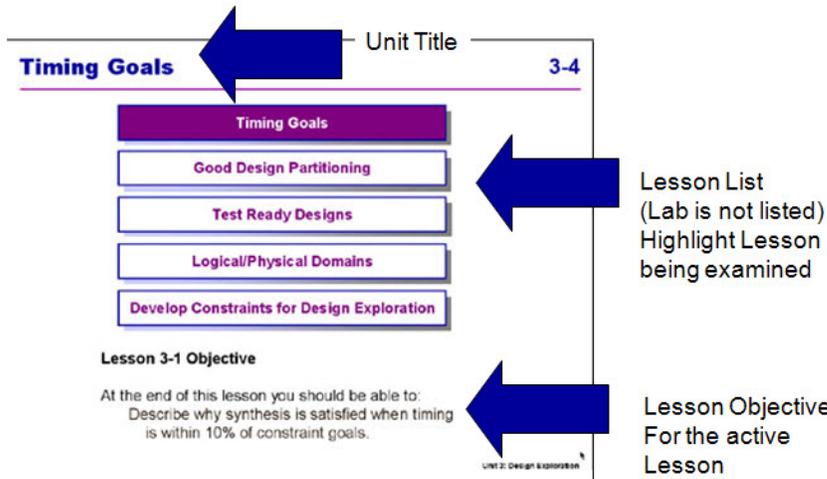
Title pages should be standard. They serve as a marker for the student.

Too many long lessons in a unit means that the unit is not well thought out in terms of eLearning and should be redesigned or modified.

Some suggestions:

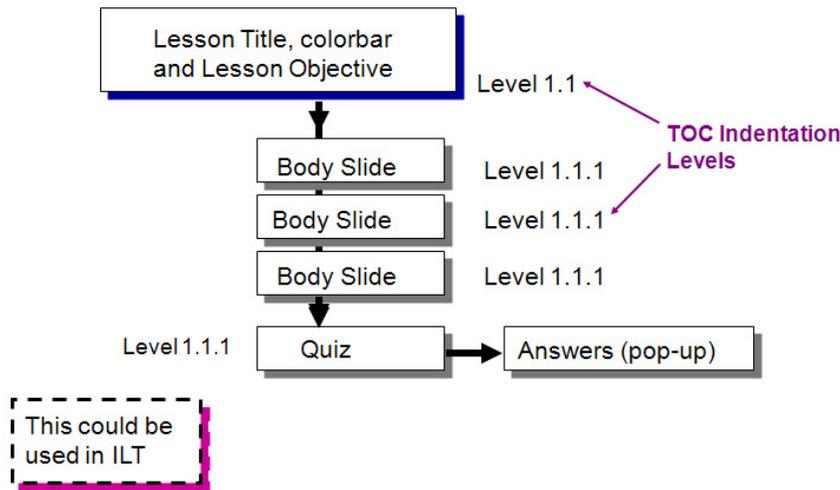
- Add in-line exercises and pop-up answer pages to break up a longer lesson
- Add examples - graphics help a lesson
- Add in-line exercises - with answers on the next page - not as good
 - using a pop-up makes the lesson seem shorter

4.1.5 Slide 34: Sample Lesson Title Page (Actual Class)



The lab is listed on the Unit title page - same as the ILT page - with the computer icon
 It is not re-listed to keep the page under size controls
 This sample from an actual eLearning class of about 5-6 years ago.

4.1.6 Slide 35: Mapping a Short Lesson

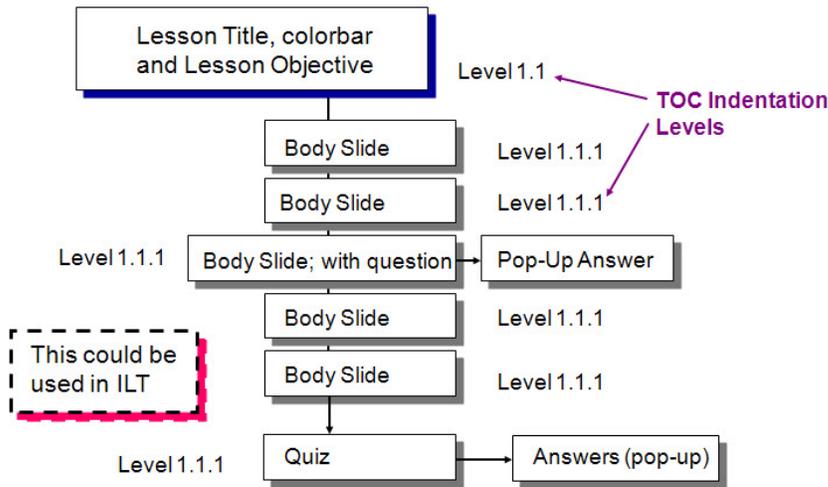


This is to show how a lesson is defined in levels.
 Levels also relate to the LMS structure (assembly) document.
 In this case:

- Three pages form the body for the lesson
- No embedded exercises are present
- The quiz is the fourth page.

A POP-UP is a slide in a new browser window
 Quizzes and Pop-ups have no levels - even if one is indicated

4.1.7 Slide 36: Mapping a Longer Lesson



Strong Recommendation for ILT: Never ask a question in the lecture material without providing the answer.

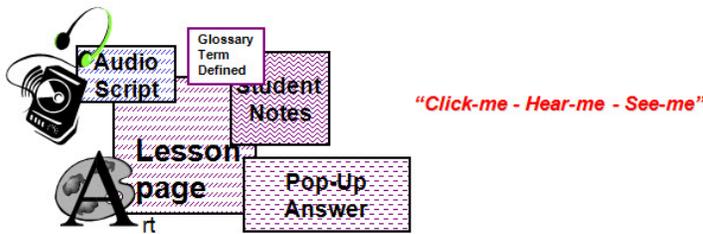
(ILT classes can get away without providing a written answer because the instructor is there to provide the answer.)

eLearning classes **should** provide answers to these questions to avoid student frustration.

A POP-UP is a slide in a new browser window

4.1.8 Slide 37: Lesson - Body

- Lesson body - Text/Art pages:
 - Recommendation: 3 pages max between a required "action"
 - If a lesson is more than 3 pages, insert a question or exercise on page 3 with the answer on one of the following:
 - A "pop-up" answer page (preferred for eLearning)
 - The next slide in sequence
 - The notes on the slide
 - The notes on the next slide in sequence



Lesson Guidelines:

- No more than 3-7 pages
- An activity of some sort every 3 pages

POP-Ups - if any slide has a question that the next slide or the slide notes section does not answer, the LD, SME or eLearning Project Coordinator should insert an answer page.

- Create a new slide (defined as a "pop-up" answer slide).
- This slide title is not listed in the LHS.
- An "answer" button is added to the slide near the question.
- This inserted page has no level in the structure document and is defined as a pop-up in the structure document.

eLearning research has shown that, for interactive training, it is best to keep the student clicking on SOMETHING every page (preferred) to every 3 pages (max). This helps to retain their attention.

Glossary items appear underlined and definitions pop-up in a new window when the term is clicked on.

Questions that have answers that pop-up, the quizzes, the glossary terms, the FAQs, all of these items contribute to the richness of the interactive experience.

4.1.9 Slide 38: Student Notes

- Guidelines for student notes:
 - Are required on lesson body pages
 - Are added explanations or examples
 - Should not be excessive - fonts should not be reduced
 - Should not be a single phrase
 - It is recommended that any instructor lead-in and lead-out information be contained in the student notes (most likely to be read)
 - Pop-up in a new window under the student's control
- This guideline is used in ILT

Notes should not use extra line spacing since that makes scrolling a long process on the LMS display. Use paragraph spacing.

Notes should NOT be done with a reduced font to "fit in the box" since the reduced font will not be used by LMS (it does not translate to HTML).

Graphics are permitted but animation should not be in the student notes.

Student notes should be enhancements of the material in the slide.

Avoid redundancy of the notes, audio and slide content.

4.1.10 Slide 39: Page Numbers and Unique Slide Titles

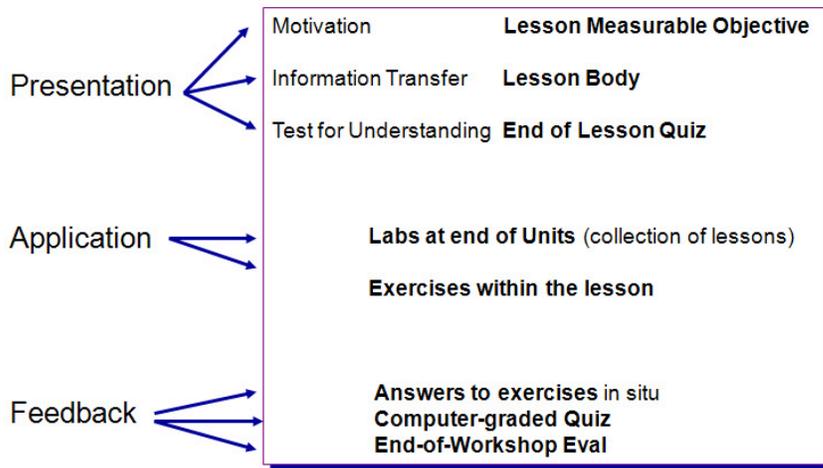
- LMS does not use a conventional page numbering system:
- For LMS, all documents (audio script, structure document, edits) must refer to the SLIDE TITLE:
 - ALL slide titles must be unique
 - The eLearning Project Coordinator should review the PPT file for Title Uniqueness
 - Non-unique titles within a Unit need to be differentiated (For example: use cont., 1:2, 2:2, etc. to make the title unique)

Non-unique titles could lead to confusion during workshop assembly since LMS relies on the titles being unique

All related material ends up as files with the SAME FILE NAME – different extension

- UNITXYZ.html
- UNITXYZ.jpg
- UNITXYZ.swf
- etc.

4.1.11 Slide 40: FKA - CD Lesson



1 on 1 alignment of the “Lesson” methodology to the FKA methodology.

Adult Learning Theory

<http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te10lk12.htm>

- a really good summary list for adult education

4.1.12 Slide 41: TOC - Initial Structure File

- Use the initial TOC from the PPT file to start the Structure File (defined later)
- Helps to review the TOC to spot non-unique slide titles
- eLearning Project Coordinator creates a list of ALL SLIDE TITLES in an Excel file
- Titles end up in a spreadsheet for tracking purposes
 - Also why they must be unique!

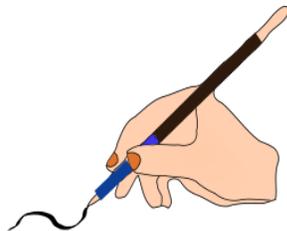
A Table of Contents list is a slide title list

Build one

Review it

4.2 Slide 42: Step 8: Write Measurable Objectives

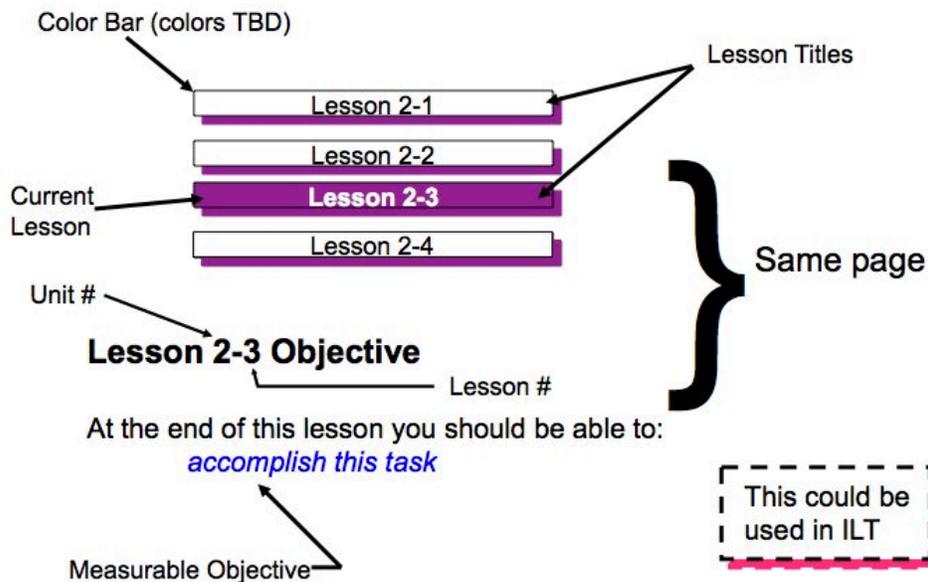
Write one measurable objective per lesson



Sample:

At the end of this lesson you should be able to:
 Identify commands needed to perform the three basic steps of a Test-Ready design.

4.3 Slide 43: Step 9: Edit Lesson Title/Objective Page (Actual Class)



Consistent template for lesson-level color bars or whatever method you choose

Make up **one** color bar scheme – *use it for the entire workshop*

Strong Recommendation: One objective only - located below the color bars

Single teaching point structure has been shown to be an effective training model.

A color bar is used to show progress through a series of topics:

Unit color bars

Lesson color bars

The current topic is colored differently to mark progress through the list

Any such scheme works – consistency is the key

Lesson titles are also required to be UNIQUE

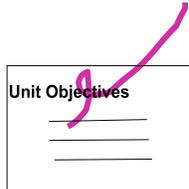
4.3.1 Slide 44: Review - Sample Lesson Title Page (Actual Class)



Sample from a real class. (Synopsys Advanced Chip Synthesis eLearning)

4.3.2 Slide 45: Delete All Unit Objective Pages

- Delete Unit Objectives pages:
 - Several Lesson Objectives pages (one per lesson) replace the Unit or Module Measurable Objectives
 - This is currently a major difference between the ILT and the eLearning workshops
 - Review the TOC to spot these pages



This step and the previous one start to change the ILT material (class notes) into the eLearning pages

A student handout from the instructor-led-training no longer matches what is seen on the screen

This is because the eLearning student must be kept tightly focused on one lesson at a time

4.3.3 Slide 46: Add Lesson Measurable Objectives

- One per Lesson
- Place on title page as previously shown
- End of lesson must measure this

4.4 Slide 47: Step 10: Create Lesson Quiz

- Lesson Quiz (one per lesson):
 - True/False or one-of-four multiple choice questions (current LMS restriction)
 - Answers on a separate slide:
 - Answer to each question
 - Explanation – mandatory

LMS GUI displays "Explanation - _____"
regardless if one was supplied or not
---- students like this to be filled in

This could be
used in ILT

Note: The quiz and answers have no "level". The Quiz actually shows up in the LHS.

The answers are pop-ups.

LMS handles quizzes in a database.

The LMS engine actually handles the quizzes and answers remote from the PPT page translation.

Quizzes and answers may be edited using the LMS Learning System after the class is released.

The eLearning representatives should be cross-trained in this function.

Question: What is better? Answer: Do it completely the first pass. Explain every right and every wrong answer.

Students want that.

4.4.1 Slide 48/49: Sample Quiz Questions¹

1. The following are steps performed during Design Exploration:
 - Check for test rule violations
 - Ensure that partitioning is good
 - Ensure that standard cell detail routing yields good timing
 - Answers a and b
2. If a design exploration synthesis with medium effort shows a 20% violation, what do you do?
 - Perform an incremental compile with a different condition
 - Run standard cell placement
 - Modify the source code
 - Create a custom wire load model
3. A high effort compile should be used to fix violations during design exploration if they are very large.
 - True/False

A mix of multiple choice and true/false are the easiest question types

Over time, other formats may be available to low-cost systems (or fancier lower-cost systems will be available)

Unless you are designing with Authorware – Adobe – was Macromedia - \$\$\$\$ - then you can do many things

4.4.2 Slide 50: Quiz Length

- To minimize web page scrolling:
 - Keep all questions to no more than one PPT slide page
 - Keep all answers to no more than one PPT slide page
- Format guidelines:
 - T/F or multiple choice format for questions
 - Guideline is 2-4 questions/lesson
 - Answers to include an explanation for the correct answer (keep to 1 - 2 sentences)
 - Wrong and right answers explained

Guideline: for a short lesson, have a short quiz!

Multiple Choice Questions:

Recommended: no more than 1 of 5 choices, typically 1 of 3 or 1 of 4

¹ These are questions that could be used in a design synthesis workshop

4.4.3 Slide 51: Sample Quiz Answers

1. d. - Detailed routing is not relevant for design exploration. This step is performed at the end of the design cycle and tool' *reoptimize_design* command² will be used for timing closure.
2. c. - Modifying the HDL (RTL) code is generally your only option during design exploration when such a large violation is found.
3. False - Medium effort compiles should be the only strategy used during design exploration. For larger violations the RTL code has to be fixed.

Repeat – repeat – repeat

Even glancing at the wrong answers imparts knowledge.

No screen should be wasted!

4.5 Slide 52: Step 11: Review for Needed Pop-Ups

- The eLearning Project Coordinator should review the PPT files for on-slide questions, exercises:
- Check for any questions or exercises that are not answered on the following slide page or in the student notes of the asking page - in the immediate area
- Flag those that need answers



A POP-UP is a slide that does not list in the LHS (left hand side lesson flow) - it comes up in a new browser window when the “answer” button on the calling page is clicked.

Hence the term “POP-UP”. Everyone by now should know what a pop-up window is and how annoying when it pops-up without being requested (such as the annoying ads).

4.6 Slide 53: Step 12: Create POP-UP Slides

- First, determine the answers for lecture questions and exercises that are not answered:
 - eLearning Project Coordinator
 - LD-SME
 - Other resources
- Second, the eLearning Project Coordinator creates a new slide for each missing answer:
 - This slide will be a POP-UP
 - An answer button will be placed by LMS on the page containing the question or exercise



POP-UPS do not have a “real” page number or level assignment on the LHS TOC

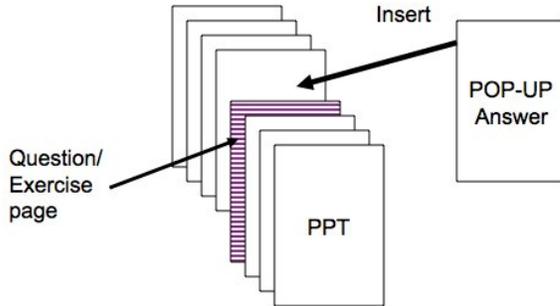
Recommendation: converting the answer to a pop-up page even if answered on the slide or in the notes in the ILT version

----- adds interactivity.

² Synopsys® software command

4.7 Slide 54: Put POP-UP Slides into the PPT file

- Third, insert the POP-UP slide into the Master PPT file
- Fourth, document the POP-UP slides in the TOC structure file



Pop-ups do not contain student notes (LMS³ limit).

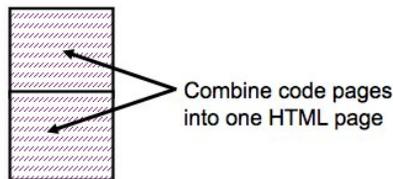
Pop-ups are limited to one slide (LMS limit).

Sample Structure File Entry:

44.2	User-Defined Path Group	page148.html	notes148.html	audio148.html
44.3	Grouping Technique: Use group path	page149.html	notes149.html	audio149.html
	Answers to the Group Questions	new page - Pop-this up		
		from link on above page		

4.8 Slide 55: Step 13: Merge Multiple-Page Code Slides

- A Recommended Option:
 - Merge all multiple-page sample code slides into one page
 - Bring over the notes from the merged page OR identify these pages and add notations to the structure file to specify that the pages are to be merged
 - If the resulting length of the Student Notes exceeds one notes page area, reduce them to reduce note scrolling



- Edit TOC structure file

This is recommended to avoid artificial breaks in a string of code - it makes better sense to put it together in the gif (or jpg today) if it is at all possible.

For PPT slides, there is a limit as to how small the font can be. In HTML, this same restriction applies most of the time. However, for code, the user will scroll the page if interested.

³ LMS limits are the ones faced in creating this particular class. Check with your own LMS or other eLearning support system.

4.9.3 Slide 59: Edit End of Unit Pages

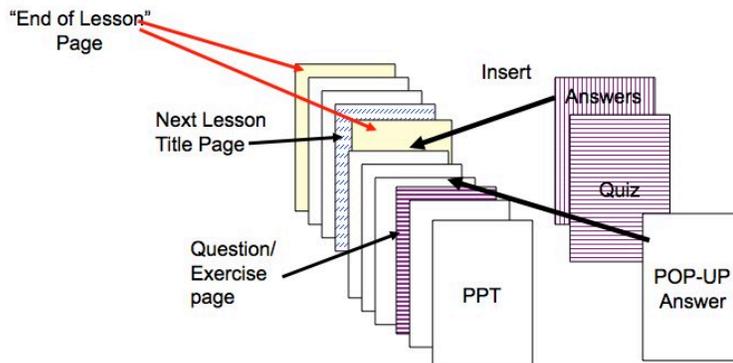
- Each Unit has an **End-of-Unit** page
- The **last Unit** to have a special End-of-unit page
- This page will include:
 - Congratulations (you finished)
 - How to exit back to take the next course if you have already registered
 - How to go look at the course description for the next course in sequence
 - Link to the web page – and all courses
 - Link to the on-line Registration page
- Use the EOM template page and edit as needed

4.9.4 Slide 60: Edit End of Workshop Page

- The last unit in the workshop has an End-of-Workshop page
- This is a “Congratulations!” page
- **Use the EOW template page and edit as needed**

4.9.5 Slide 61: Add all “End-of” pages into the TOC

- Update the TOC- structure file for all added slides



4.10 Slide 62: Step 15: Record Opening Audio

- The lead developer records an opening paragraph audio script for each unit (optional)
 - Supply .wav and .doc files
 - Supply a photo to be used with the audio

4.11 Slide 63: Step 16: FLASH Opening Page

- eLearning Developer implements a FLASH animation opening page
 - Use FLASH template developed for this
 - Welcome art from Marketing
 - Recorded file
 - Edited photo art (cut-out)
 - Long loop

4.12 Slide 64: Step 17: Identify Other Animations

- Identify other pages to have FLASH animation
 - Lecture and labs
 - Check for existing animations that can be reused directly or with limited edit
- Indicate animation pages within the structure document

4.12.1 Slide 65: Create Animation Specification

- eLearning Project Coordinator and Lead Developer identify the pages that are to be animated
- Lead can indicate if there is a way that the page should be animated
 - Or the FLASH animator will make the first pass
- Caution! Animation should enhance the learning experience, not show off animation tricks!

4.12.2 Slide 66: Step 18: Create FLASH Animation

- This can proceed in parallel with other actions
- Animation reviews can be on-going as well
- Allow 2-8 hours development time per animation
- Check for the re-use library
- Use the Standard FLASH Symbol Library (copy to your system)

4.13 Slide 67: Step 19: LECTURE REVIEW

- Assembled PPT file now contains:
 - Lesson Objectives
 - Quizzes
 - Answers
 - Pop-Ups



- Recommendation:
 - Allow 7 calendar days minimum for eLearning Team review (actual schedule should have been built into the project timeline)
- **Note: Content (actual lecture) is not to be edited since ILT is a released workshop**

4.14 Slide 68: Step 20: Incorporate Review Comments

- eLearning Project Coordinator incorporates Lecture Review comments into files
- Includes comments on:
 - Lesson Objectives
 - Quizzes
 - Answers
 - Pop-Ups



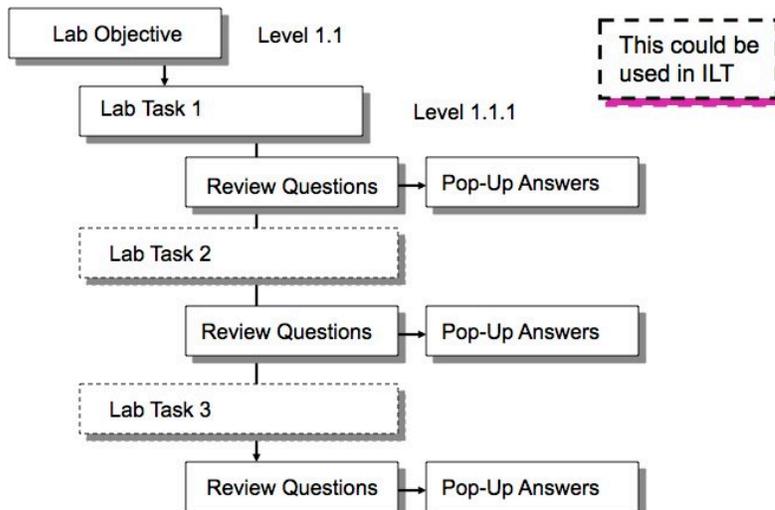
PPT file (answer pop-ups, objectives, color bars)

WORD files (labs, quizzes, Glossary and FAQ)

5 Slide 69: Labs, Glossary and FAQs

- Introduction
- Conversion to Lesson-Orientation
- Labs, Glossary and FAQs
- Audio Script – Structure Document
- Review Process

5.1 Slide 70: Lab Graph



A lab may have multiple tasks.

If a unit has multiple labs, the LMS system will flow them in sequence.

Recommendation:

- Put the tasks in individual files so that they appear as titles under the Lab Objective (at level 1.1.1 for LMS)

5.2 Slide 71: Step 21: Create Clean Lab Objectives

- Recommendation for eLearning Project Coordinator:
 - If a clear lab objective does not exist
 - Write one



- If the lab has multiple parts or tasks:
 - Create or Verify that there is a lab objective for each task
 - Objective must be measurable
- This could be used in ILT

5.3 Slide 72: Step 22: Review Lab Exercise Questions

- eLearning Project Coordinator reviews Lab task review questions:
 - Do answers exist for each question?
 - If questions are included, then answers must be provided
- If there are missing answers, consult with the LD - SME to determine what response should be made

5.3.1 Slide 73: Edit Review Questions

- Computer-graded questions would be nice:
 - Recommendation: have some true/false and 1 of 4 multiple choice questions, (same style as the lessons) (current LMS format limit)
- Questions at the end of lab "tasks" could be done as a mix of the above
- Some questions could be reformatted for computer-grading



Answers to review questions that cannot be T/F or multiple-choice are handled as Pop-Ups from each task review page.

If it is possible to reformat some questions into the desired format, it allows computer grading and therefore progress charting for the labs just as for the lecture.

eLearning Project Coordinator working with the LD-SME should try to reformat some questions if not all.

5.4 Slide 74: Step 23: Convert Labs to PPT Format

- Labs are to be in the PPT format
- Perform conversion if they are not already in that format
- Refer to the **PPT Format Lab Proposal - Approved**
- Add the Lab slides to the TOC - Structure Document

5.5 Slide 75: Step 24: Compile a Glossary

- eLearning Project Coordinator can build on the workshop glossary already developed:
 - Create a list of added terms/phrases to be defined
 - Supply the definitions
 - List any SolvNet articles that might support the answer or provide further information



- This could be, and has been, used in ILT

Glossary - make sure that every acronym and phrase is defined in the glossary and that special exception call-outs are made (“PhaselI” picked up “II”'s definition for example - so “II” has to be hidden).

The glossary is editable “on the fly” by the eLearning Project Coordinator using the LMS system.

The glossary pop-up links on the workshop pages are auto-generated. As such, there will be a page-by-page review necessary to delete specific incorrect links (picking up “II” out of “PhaselI” for example; this one was obviously of concern) during the alpha.

5.5.1 Slide 76: Crosscheck DTP Index - Glossary

- Create/obtain an index for the workshop material
- Scan for terms that should be in the eLearning glossary
- Add to glossary as needed



The index that is created for the ILT workshop should be used as a source for the glossary.

5.6 Slide 77: Step 25 : Create FAQ List

- eLearning Project Coordinator obtains an FAQ list from the LD, SME and/or support
- Compiles the list of those questions without answers

---- This could be used in ILT

For LMS - FAQs - must be tied to specific lessons - level 1 connection - and listed by Slide Title, not slide number.

Use page titles not slide numbers as the html page number bears little or no relation to the slide number in the ILT version. (LMS tracks by title.)

Some FAQ questions that do not belong to a lesson may also be included. They will appear in a total course display (as opposed to a lesson display that will only feature the specific lesson's FAQs).

5.7 Slide 78: Step 26: Answer FAQ Questions

- eLearning Project Coordinator obtains answers for the FAQs that have no answer from:
 - ACs
 - LD
 - SMEs
 - CAEs
 - SOLD



5.7.1 Slide 79: Tag FAQ Questions to Lessons

- Tag each question to a specific *lesson title*
- For questions that have no applicable or corresponding lesson:
 - Identify them as general
 - They become overall FAQ list members (LMS system)



5.8 Slide 80: Step 28: Lab/Glossary/FAQ Review

- eLearning Team reviews changes to the lab docs:
 - Task Objectives
 - End-of-Task review questions and answers
 - Reformatted (T/F and multiple-choice) computer-grade-able questions
 - PPT Format Conversion and any added artwork
 - Review the Glossary
 - Review the FAQs
- Recommendation:
 - Allow 7 calendar days minimum for eLearning Team review (actual schedule should have been built into the project timeline)



5.9 Slide 81: Step 29: Implement Lab Review Comments

- eLearning Project Coordinator incorporates edits on:
 - Lab objectives
 - Task reviews
 - Answers
- Also incorporate edits for:
 - Glossary
 - FAQs

6 Slide 82: Audio Script – Structure Document

- Introduction
- Conversion to Lesson-Orientation
- Labs, Glossary and FAQs
- Audio Script – Structure Document
- Review Process

6.1 Slide 83: Step 30: Create Audio Script

- LD-SME and eLearning Project Coordinator create an audio script in the following format:

Unit 10 Compile Techniques

Page 1 Compile Techniques
no audio

Page 2 Solving Problems of Major Sub-Blocks
no audio

Page 3 Solving Problems of Major Sub-Blocks.

Sample

Consider a major sub-block to be about 200K gates - or what you can run overnight. It is the first large block assembly. You ran a default compile on a sub-block made from many smaller chunks of code that passed design exploration. You want these 200K blocks to pass timing as well before integrating them into the top-level 800K blocks. You will focus are solving timing problems with-in the sub-block. Problems with paths not fully contained cannot be resolved. Remember that at this level, all outputs from the sub-block should be registered, reducing the complications of a timing budget.

The on-line student has a **short** attention span

Recommendation for the Audio Script

- No less than 2 sentences and not more than what results in 6 to 7 lines of text on the audio script display.
- DO NOT repeat the points made on the slide
- DO NOT repeat the point made in the student notes as all three may be displayed on-screen at the same time.

List the page by Slide Title, not page number.

Lead-in-lead out should have been handled on the slides themselves since students may zip through without notes or audio [point of contention].

eLearning Project Coordinator can create the slide title list (export the compressed outline from PPT to Word and edit - numbers will be messy) to pass to the LD or SME designated to write the script (may be more than one person).

6.1.1 Slide 84: Instructor's Guide as ref. for Audio

- A word document that describes additional information that is not to be shown to students:
 - This information is not transmitted to the eLearning vendor
 - This information may be useful in reviewing the student notes and the audio script
- Current Format: Slide number and slide title followed by comments in a paragraph

-----This is currently used in ILT

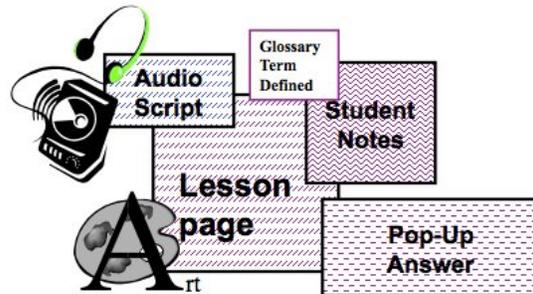
The instructor's guide can serve as a reference when the audio script is created.

No copy of the slide is currently provided in the Instructor's Guide - refer to the slide titles.

No standard format for this document in the case study.

6.1.2 Slide 85: Audio Script Guidelines

- The audio script should not repeat the content of the slide or the content of the student page notes because all three may be on the screen at the same time
- The audio script should focus on what the live instructor would say in the classroom



When there is a lot of information to share, consider adding to the student notes or changing the slide into more than one slide.

Recommendation: Do not include excessive amounts of audio:

- If there are a lot of facts to be imparted, they should be on the slide or in the student notes
- Students are not required to listen to the audio and do not listen if it is too long or takes time to load
- **Do not include audio on title pages, lesson objectives, or quizzes**

The following are guidelines from LMS (as used by other customers)

- Audio script - 1/4 of a page in WORD
- No extended margins, reduced fonts, etc

OR

- 2 to 5 sentences (depends on sentences)

OR

- What appears on the screen as a short 6 to 7 line paragraph

Reminder:

- Buffering will be an issue on any distance learner's system and for any non-T1/T10 connection

6.2 Slide 86: Step 31: Review Written Audio Script

- Allow 7 calendar days minimum for the eLearning Team to review the written script:



- Actual review timeframe should have been built into the project timeline

6.3 Slide 87: Step 32: Implement Audio Script Comments

- eLearning Project Coordinator and LD - SME implement changes to the audio scripts:
 - Resolve conflicts on conflicting edits
 - Review for length
 - If possible time-wise
 - Note: Issue the final edited files for re-review by the team if too many edits were made



6.4 Slide 88: Step 33: Edit Final TOC in Excel

- Check that ALL SLIDE TITLES are in the Excel TOC - structure file
- Pop-Ups and Quizzes are included
- Lab and Task headings are included
- Animation locations are noted
- All opening, EOU, EOM and EOW slides are included
- Unit 0 eLearning is included
- Clearly mark the Start and End of each unit

One Way:

- Export the compressed outline to word
- Print to file and convert to PDF
- Cut and paste to structure list (useful when patching an existing list)

Another Way:

- Use the TOC from DTP
- Edit for the missing slides
- Paste into Excel

Another Way:

- Export from PPT (compressed outline) to Word
- Copy and Paste Word list into Excel

6.4.1 Slide 89: Structure Document

- A structure document provides all storyboard action and assembly directions to the eLearning vendor
- Assemble a structure document as follows:

Column 1	Structure level (1.0, 1.1, 1.1.1, to 3 levels)
Column 2	Page Title (NOT page number)
Column 3	Can be other notes (audio script instructions for a pop-up for example)
Level 1.0 is for Unit titles, Lesson Titles and Quizzes	
Level 1.1 is for Lesson Objective, Lesson body pages	
Level 1.1.1 is for sub-levels under the body pages	
EXCEL	

Structure file:

Column 1: is for level designation for the page (1.0, 1.1, 1.1.1, n/a for pop-ups).

Column 2: create an initial Excel file with all slide titles, quizzes, objectives, answers and pop-ups as well as all labs titles.

LMS assembly directions for Column 3:

Edits and directions for the pages (add a link, link to (URL), popup page from (wherever), edit title to: xxxxxxxx, this page animated, etc

CES does not edit that file.

In the case of a workshop update, training can request that database-created structure file from LMS and put edits in the third column to communicate changes. No one will usually edit the HTML or graphics but will provide directions to do so to the vendor.

6.4.2 Slide 90: TOC - Levels

- The LMS TOC on the LHS is based on three (3) levels because that is what Synopsys chose for readability reasons:
- The level reflects the indentation
- Each "Unit" is treated as a "Course" within the workshop - Unit numbers are not used at the moment
- As presented before:
 - Each Unit is listed as Level 1.0
 - Each Lesson is Level 1.1
 - Lesson body pages are Level 1.1.1

The standard bullets have been requested for the LMS GUI - a style sheet item

- Level 1 - Square
- Level 1.1 - filled-in circle
- Level 1.1.1 - open circle (HTML has no diamond)

6.4.3 Slide 91: How Levels Work in the LHS TOC

- Level 1.0 appears in the TOC at all times:
- It will expand into its sub-parts (Level 1.1) when selected
- For on-going classes, lessons and lab tasks should be at Level 1.1
- Level 1.1 will expand to list Level 1.1.1 entries when it is selected:
 - It is better not to have long strings of titles at Level 1.1.1 (LMS's system resets to the top of the LHS with each slide)

Long LHS lists are reset to the top requiring scrolling to find "where you are". This is the way that the LMS system works.

The "reset to the top of the index" feature causes a lot of comment and difficulty for the student - which means that they will use the "Next" button or run the class on auto-page turn.

This is another factor in keeping the number of slides in a lesson small.

6.5 Slide 92: Step 34: Complete Animation

- At this stage, planned animations should be complete
 - Time frame for development is 2-8 hours per animation
- **File names can be tied to slide titles in the TOC - structure file**
- Both .fla (source files) and .swf file (FLASH movie files) should exist



6.6 Slide 93: Step 35: Review Animation

- Set up .swf files for review by the Lead Developer and other interested parties
- Recommendation: do partial review as you go

6.7 Slide 94: Step 36: Implement Animation Edits

- Incorporate review comments into the .fla files
- Regenerate the .swf files



6.8 Slide 95: Step 37: Package Assembly and Deliver

- Package Assembly and deliver to Vendor:
 - Assembled edited PPT files
 - Assembled edited Lab files (WORD files)
 - Starting Structure File
 - Audio Scripts (WORD files, .wav files)
 - Question/Answer Files (optional)
 - Glossary
 - FAQ
 - FLASH files (.swf)
 - Source files for any art created outside of PowerPoint

Structure File

- Includes Lab Tasks

Question/Answer Files

- Question/Answer Word Files override the PPT files if there is a conflict (when separate documents are used)

Assembled workshop rather than pieces

- If the files go to the vendor one at a time or may be broken into smaller groups,
- For smaller groups, the QA of the assembled workshop may take longer. There may be incorrectly placed quizzes, missing quizzes, missing or improperly linked pop-ups, and other assembly issues. It might save time to stage the delivery, but in the end it may also cause delays due to the need for several review passes.
- Mark all graphics to be animated in the structure file so Vendor does not convert even if the animation is not complete at the package submission time
- Submit all artwork source files (.ai, .fh, .ph, Visio, etc) in native (software) format
- Submit all pre-recorded .wav files - as for the Welcome pages

For LMS submissions:

- Use the LMS FTP site to Upload the files
- Use the UPLOAD subdirectory they set up for Synopsys

6.9 Slide 96: Step 38: Notify Marketing of Status

- Update CES Marketing on delivery
- Confirm remaining schedule dates
- Team begins final review of:
 - external web registration pages
 - pull-downs
 - course description

7 Slide 97: Review Process

- Introduction
- Conversion to Lesson-Orientation
- Labs, Glossary and FAQs
- Audio Script – Structure Document
- Review Process

7.1 Slide 98: Step 39: Schedule Alpha

- Confirm Alpha Review Team
- Schedule Alpha:
 - Confirm dates with the vendor
 - Secure a Room, if needed
 - Notify Support, if a room is to be used
- **Announce Alpha a minimum of four weeks ahead of time;** six weeks preferred:
 - ACs and CAEs requested this lead time (or equivalent acronyms)
 - Include instructions for registration (non-web)
 - No customers in an Alpha

α

Notify Support of room set-up requirements at least two weeks before the Alpha is scheduled

Set-up procedure for login-password issues

7.2 Slide 99: Expectations for The Alpha

- An Alpha review is
 - **Not content-oriented**
 - For verifying all links, hooks, files are present
 - Check that the audio works
 - Perform verbal pronunciation check
 - Verify that the GUI works (chat, email, BBS)
 - Check the FAQ
 - Check the TOC
 - Check the glossary links (any need suppression?)
 - Check that the animations function

7.3 Slide 100: Step 40: Schedule Beta

- Schedule Beta:
 - Confirm dates with the vendor
 - Secure a Room if not all remote
 - Notify support (if needed)
- Announce Beta a minimum of four weeks ahead of time, six weeks is preferred:
 - Include instructions for registration (web)
 - Beta is open to customers
- All accounting issues, registration details, kit definition, etc., should be complete at this stage
- Web page should be “live”

β

If using a classroom, notify Support of room set-up requirements at least two weeks before the Beta is scheduled.

Confirm procedure for login-password issue.

7.4 Slide 101: Step 41: Vendor Assembles Pre-Alpha

- Pre-Alpha assembly for early review
- Approximate 4-week wait time for LMS
- Vendor-specific, contract-specific



7.5 Slide 102: Step 42: Pre-Alpha review

- eLearning Project Coordinator and LD - SME
- Play Individual Audio files:
 - Compare to written script
 - Check pronunciation
 - Compile comments/edits
 - Identify by Title
 - Identify by the file name
- Check art, animation
- Check Quizzes, answers
- Check pop-ups
- Perform this check 1 week prior to the Alpha

The recorded audio is available for the Alpha review as well. The purpose of early audio file review is to spot serious pronunciation problems with the professional voice and allow a re-record of the obvious errors pre-Alpha.

7.6 Slide 103: Step 43: Transmit Edits to LMS

- eLearning Project Coordinator uploads comments, corrections and edits to vendor
- Confirm edit completion date with vendor
- Allow two weeks in schedule for this pre-Alpha step if edits to be complete at Alpha



7.7 Slide 104: Step 44: Vendor Assembles Alpha

- Approximate 2-week wait time for LMS
- Vendor-specific, contract-specific



7.8 Slide 105: Step 45: Alpha Review

- Conduct the Alpha Review
 - LMS can capture any notes made by the students
 - Issue a compiled file set, page by page
- Attendees:
 - Full eLearning Team including LMS
 - Invited ACs, CAEs, Training Staff

7.9 Slide 106: Step 46: Compile Alpha Edits

- Active in-line notes compiled from all alpha reviewers by the LMS system
 - Verbal comments integrated by eLearning Project Coordinator
 - Distribute to the LD - SME
 - Both determine edits needed
 - Determine Assembly issues
 - eLearning Project Coordinator discusses all changes with LMS (or other vendor)
 - Determine completion date from vendor

7.9.1 Slide 107: Alpha Edits

- Determine the need for a second alpha based on the results of the Alpha
- Confirm schedule for Beta based on the results of the Alpha
- Notify Marketing of updated schedule

7.10 Slide 108: Step 47: Vendor Assembles Beta

- Approximate 2-week wait time for LMS
- Vendor-specific
- Contract-specific

7.11 Slide 109: Step 48: Hold Beta Review

- Conduct the Beta
- LMS can capture any notes made by the students
 - Issue a compiled file set, page by page
- Attendees/Reviewers:
 - eLearning Team
 - ACs, CAEs, Training Staff
 - Customers

7.11.1 Slide 110: Beta Expectations

- A Beta review is:
 - Not content-oriented
 - For verifying all links, hooks, files are present
 - Check that the audio works
 - Perform verbal pronunciation check
 - Verify that the GUI works (chat, email, BBS)
 - Check the FAQ
 - Check the TOC
 - Check the Glossary links (any need suppression?)
 - Check that the animations function
 - Check the on-line registration process
 - Check that all edits have been made

7.12 Slide 111: Step 49: Compile Beta Edits

- Active in-line notes compiled from all alpha reviewers by the LMS system
- Verbal comments integrated by eLearning Project Coordinator
- Distribute to the LD - SME
- Both determine edits needed
- Determine Assembly issues
- eLearning Project Coordinator discusses all changes with LMS (or other vendor)
- Determine completion date from vendor

Edits should be very minor:

- ***If not, a second Beta is needed***
- ***Return to Step 37: Vendor Assembles Beta***

7.13 Slide 112: Step 50: Vendor Does “Touch-Up”

- If more than minor changes - abort back to alpha edit integration and loop
- **This re-do is not an anticipated step**

7.14 Slide 113: Step 51: Release to Public Registration

- With the full team’s agreement:
 - Workshop is Released to the Public
- Coordinate with Marketing

7.14.1 Slide 114: Enter Warranty Period

- Compile Edits and comments during specified period (45 days? 60 days? 90 days?)
- Process through LD-SME
- Compile all edits
- Coordinate hand-off to vendor per contract schedule
- Confirm vendor date of incorporation:
 - **Note:** Course remains on-line during this time



This is independent of the ILT 90 day warranty period (actually occurs after it is completed). Discussions as to the warranty process are on-going.

7.14.2 Slide 115: Post Mortem

- Conduct a meeting
- Review how the process worked
- Review how the process had to be changed and why
- Summarize what changes/additions are needed in the conversion process

7.14.3 Slide 116: Life After Post-Warranty Release

- Continuous improvement:
 - LD-SME, instructors, Customer Service all collect edits over workshop life
 - Edits used as input for the new Needs Identification Document requesting workshop revision
 - **Note:** Different Needs Identification Documents for ILT and eLearning
- Should be some established level that triggers a revision cycle

7.14.4 Slide 117: Archival Process

- Refer to existing Courseware Server Documentation Archival Process
- Don't have one? (Really?)
- Make one!

7.14.5 Slide 118: Support Process

- Refer to the eLearning Support Proposal
- Don't have one?
- Make one!

7.14.6 Slide 119: Any Questions?

- Building an FAQ for the Process

8 Slide 120: Appendix: DTP Process Basics

- Bullets, levels, lists format and Template
 - Overall appearance, consistency
- Non-template colors check (web-safe for eLearning):
 - No gradients, patterns - they will not translate to web
- Contractions, slang, jargon deletion/replacement:
 - Non-English speaking audience may not understand these constructs
- Grammar, sentence structure, punctuation
 - Non-English audience may not understand bad grammar

9 Slide 121: Appendix: Some References

- Sources:
 - ILT guidelines including FKA Training
 - Adult Learning Guidelines (established research results)
 - Existing research into web-based training and students
 - Comparisons of several vendors, their guidelines and approaches
 - LMS vendor's guidelines and discussions

10 Slide 122: eLearning Glossary

- Audio Script = what the professional voice will read and record
- BU = Business Unit
- CD = Content development
- DTP = Desk-top publishing
- eLearning = Web-Based Training; in this instance, browser-based instruction
- FAQ = Frequently Asked Questions
- IG = ILT Instructor Guide
- ILT = Instructor-Led Training
- LD = Lead Developer
- LG = ILT Lab Guide
- LHS = Left Hand Side (Browser window index runs down the left side of the window in the LMS GUI)
- Measurable Objective = Objective with an action (such as list, state, describe, write, run a program) that can be evaluated to determine if information has actually been transferred; objective not subjective
- POP-UP = a new browser window (original window remains on the screen); an answer page to a quiz, an in-line slide question, a glossary definition, and an FAQ are usually treated as pop-up pages
- PPT = PowerPoint
- RHS = Right Hand Side (HTML page body)
- SG = ILT Student Guide (lecture material)
- SME = Subject Matter Expert
- TFU = Test For Understanding
- TOC = Table of Contents

Also, A source file is any file in which art or text was created

11 Common ICONS Used In This Document

	<p>Review Files for Specific Items (Full or partial Team Reviews)</p>		<p>Incorporate work supplied by others -eLearning Project Coordinator with SME or other designated eLearning team member</p>
	<p>Write New Material e.g. lesson objectives - simpler task - eLearning Project Coordinator and/or SME</p>		<p>Cross-reference item to a specific slide (audio, FAQs are tagged to specific slides) -eLearning Project Coordinator</p>
	<p>Develop new material e.g. definitions, answers to questions, etc. - more complex task - eLearning Project Coordinator and SME; other resources as required</p>		<p>Wait for vendor to perform a step in the flow</p>

Make up your own – but communicate what they are – what they mean

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