

Suggested Process for Creating eLearning Objects

The following definition has been adapted from Cisco's definition of a Learning Object , "An eLearning Object is a single learning objective with a measurable outcome, delivered and supported by discrete and reusable digital media, which may be used independently or with other eLOs to produce a lesson or unit of instruction. The time to complete should not exceed 15 minutes."

Basic eLO structure:

- a. Objective
- b. Instructions and duration estimate
- c. Key terms
- d. Introduction
- e. Lesson
- f. Practice or knowledge check
- g. Lesson continued
- h. Review
- i. Assessment

Identify the topic to be covered

Break the lesson down into the smallest component (chunk)

- Are there any concepts that could be better explained elsewhere?
- Is more than one idea being covered?

Remove contextual elements

- The eLO should stand on its own and not be supported by other materials
- Remove textbook reference numbers
- Specific web page addresses
- Limit use of third party media (e.g. publisher content, replaced when changing textbooks)

State the objective in specific and measurable terms

- Present tense
- Active voice
- Specific conditions (e.g. how well, how many)
- Measurable

Suggested Process for Creating eLearning Objects Continued

Gather materials

- Publisher textbook and other items
- Pictures, drawings, illustrations, etc.
- Notes, handouts, etc.
- This should only be items that are on-hand; nothing should be created or searched out

Create an outline

- Flow chart (OpenOffice Draw)
- Mind map or brainstorm (OpenOffice Draw)
- Organize into a logical order or outline (OpenOffice Impress)

Formulate a Script (Split-Page)

- Only text, no visuals yet
- Condense the presentation text to key ideas, steps, etc.
- Use narrative to elaborate or notes area

Review Lesson

- Check for inaccuracies
- Proof
- Accommodations for different learning styles
 - Verbal-Linguistic
 - Logical-Mathematical
 - Visual-Spatial
 - Bodily-Kinesthetic
 - Musical-Rhythmic
 - Interpersonal
 - Intrapersonal
 - Naturalist
- Include information on lesson duration
- Include a knowledge check, practice, or other memory retention device
- Identify and define key words and concepts
- Provide a review or summary at the conclusion

Subject Matter Expert Review

- Lesson is peer reviewed for content accuracy
- Sign-off

Instructional Design Review

- Sign-off

Suggested Process for Creating eLearning Objects Continued

Technical Review

- Sign-off

Prototype

- Assemble materials
- Transcribe media
- Beta testing
 - Confirm working order in Internet Explorer 6.0+, Netscape 7.x+, and Firefox 1.0+.
 - Confirm working under Windows 2000, XP, Vista, and Mac OS X
 - Preview under dial-up and broadband
 - Pages conform to W3C Guidelines (CSS, HTML, XHTML, etc.)
 - Accessibility testing:
 - <http://www.cynthiasays.com/>
 - <http://sourceforge.net/projects/fangs>
 - <http://cita.uiuc.edu/evaluation/>
 - <http://vis.cita.uiuc.edu/>
 - <http://michelf.com/projects/sim-daltonism/>
 - <http://wave.webaim.org/>

Publication

- Item is published into course, web page, or the Orange Grove
- Solicit feedback and monitor student performance
- Re-visit annually