

Using the SCORM 2004 Specification to Provide Different Learning Paths in e-Learning Courses

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Abstract

The main objective of this paper is to demonstrate that we can develop different learning paths for e-learning courses using the SCORM 2004 Specification.

This specification is developed by the ADL (Advanced Distributed Learning) Initiative of the US Department of Defence. In this specification, instructional designers will have to organize learning content in terms of SCOs (Sharable Content Objects). These SCOs can then be structured into different clusters and with different sequencing and navigation patterns. A learning sequence for a particular student then becomes a particular sequence of the SCOs together with some navigation rules. Pre-tests and post-tests can be inserted where there is a need to check the student's competency or knowledge levels.

With this specification, the instructional designer can enable the tracking of learner's learning as well as the sequencing and navigation mechanisms. These mechanisms can be developed so that learners with different abilities can be provided with different learning paths. In this way, the student will be able to learn the content better and the teacher or trainer does not have to intervene much.

The key issues that this paper will address include that of content chunking and organization, clustering of the SCOs and specifying the different sequencing and navigation paths. Nine different sequencing paths will be explained in the paper. Some of the sequencing paths include that of sequencing according to knowledge, competency and for remediation purposes.

With rising expectations from students nowadays, teachers and trainers are expected to provide high quality e-learning contents. Students want to have e-learning content that is customized to their learning capability or competency rather than be given learning content that can be learned either sequentially or randomly. This is where the sequencing and navigation aspects of SCORM 2004 3rd Edition Specification can help the teachers and trainers.

This paper also discusses some of the limitations, the tools, tips, templates, systems and examples of the SCORM 2004 Specification.

Keywords: SCORM 2004, Different Learning Paths, e-Learning, Advanced Distributed Learning

Remarks: The full paper may be found in www.elearningap.com