Chapter 18
Modeling for Learning Design Repositories

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ABSTRACT

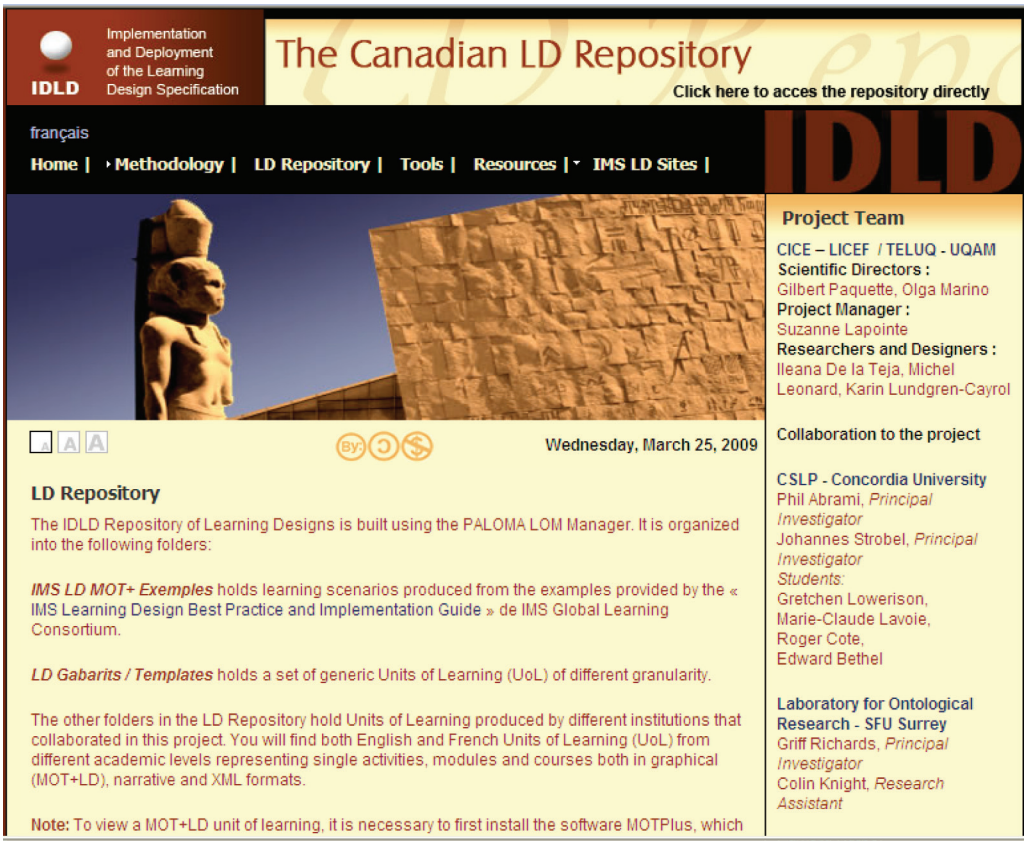
- A Learning Design Portal
- Learning Design as Learning Objects
- A Case Study: Producing and Reusing Patterns and Learning Designs
  - Description of the Reusability Process
  - Analysis of the process
- An Ontology for Learning Design Objects
  - Main Ontology Model
  - LD Format Relationships
  - Reusability Categories
  - Aggregation Level and Delivery Model
  - Pedagogical Strategies
  - Learner Evaluation Model
  - Using the LD Objects Ontology

DOI: 10.4018/978-1-61520-839-5.ch018

The deployment processes of a new technology or a methodology like Instructional Engineering is crucial if we want R&D results and products to reach end users with innovative products and services that produce quality and growth. These preoccupations are at the origin of the IDLD project that provides the main thread of this chapter. This project is based previous projects in the same area: R2R (Paquette, Marino, De la Teja, Lundgren-Cayrol, Léonard & Contamines, 2005) and edusource (McGreal, Anderson, Babin, Downes, Friesen, Harrigan, Hatala, M., MacLeod, Mattson, Paquette, Richards, Roberts & Schafer, 2004).

In the first section we present the IDLD portal (Figure 1) that contains a repository of learning design models and examples. Such a repository groups narratives (lesson plans), MOT+LD mod-

Figure 1. A view of the IDLD web portal



els and the corresponding XML files compliant with the IMS-LD specification. It contains also an adaptation of the MISA Learning System Engineering Method presented earlier in chapter 8. In section 2, we will present how we have adapted the Learning Object Metadata (LOM) to structure the LD repository, considering LDs as special kinds of learning objects. For this, we had to integrate two classifications schemes into the PALOMA Learning Object manager. PALOMA will be presented with more details in chapter 20. In section 3, we will present a reusability process for decomposing a course into smaller patterns and re-using some of them to compose new courses. In section 4, we will propose an ontology that can help structure learning design repositories and enable more useful queries to such repositories.

18.1. THE IDLD PORTAL

Building LD repositories has been identified as a priority in a Valkenburg Group round table held in January 2004 (Paquette et al, 2004). In order to fulfill this need, the IDLD Web portal has been built. This IMS-LD resource center is now in operation at www.idld.org providing a free access to a repository of learning designs, a suite of tools to support the deployment of IMS-LD, methodological aids to help in its implementation and a number of background documents and related sites.

All object and information in the IDLD Portal can be reuse under a give credit/non commercial/share alike Creative Commons licence. Knowledgeable persons are invited to use the tools in the Portal and add learning designs to the repository using the PALOMA software.