IMS Learning Design Update

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Learning Designs in a Networked World
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Background

- IMS Learning Design version 1.0 released in 2003
- Based on Educational Modelling Language (EML 2000)
- Update on current activities in Europe
What Vision Drives the LD Activities

How can we improve the pedagogical quality of e-learning courses in an interoperable way with user-friendly tools?
What is LD?

- eLearning ‘Standard’ published by the IMS consortium in February 2003
- Based on Educational Modelling Language (EML) developed at the OUNL
- MS LD replaces EML
Why LD?

- get rid of proprietary non-interoperable solutions
- get rid of the oversimplified technological driven views of learning/teaching, eg. learning is consuming sequenced learning objects
- extend the possibilities of e-learning: new more effective, efficient & attractive learning models (active learning, problem based, ...)
- integrate the large number of isolated existing standards (LOM, CP, QTI, RCD, LIP, ..) to create executable units of learning ('courses')
- Support automation of the workflow in the teaching/learning process to decrease workload
What it does...

- model different kinds *pedagogical models*
- describes all processes, content and services within a course in an interoperable way
- supports *personalisation* of learning activities
- supports *reuse* of (components of courses)
- supports *multi-role workflow* within teaching/learning
Roadmap for LD implementation

b. Awareness raising (febr. 2004)
c. First generation tools (febr. 2005)
d. Demonstrators (during 2005), usability improvement of tools, and application profiles and conformance testing
e. Development of community of users (from 2006)
Valkenburg Group

- Ad hoc community of persons interested in developing tools for IMS LD incl. R&D issues
- European partners in Valkenburg are now funded by EU (UNFOLD project)
- Tool development projects (Reload, etc.)
- Test suite/application profiles for LD (Telcert)
- February 2004: group wrote chapters of Springer Book Learning Design
- During the Unfold period, we invite non-europeans to participate in co-organized Valkenburg meetings.
Status of Tool Development

- Reload editor (Level A editor Nov. Preview in CopperCore)
- Alfanet level C editor and player (June 2005)
- Lams (Level A editor + player (mid 2005)
- CopperCore Engine (Level C LD Engine dec)
- eLive Visual LD Editor (level B, nov).
- Chronotech level A LD/EML editor (nov)
- Service Based Learning Design System OUNL/BOU JISC (Nov)
- MOT+ input/output filters (?)
- Eduobox (EML 1.1)
Main Partners
UPF, JISC/CETIS, EUCEN and OUNL

Focus of UNFOLD?
Adoption of IMS Learning Design

Target Group
- Systems Developers
- Learning Designers
- Teachers and Learning Providers
- PhD students working on LD or EML
Major Activities

- Setup of CoPs for every level of target group
  - support for tool developers (installation CD)
  - support for learning designers (demo materials)
  - support for providers (through EUCEN)
  - support for PhD students in LD
- Setting up (a pilot) Learning Network for Learning Designers (ln4ld.learningnetworks.org)
- Organization of Conferences, workshops, etc. incl. Valkenburg Group Meetings
- Publication and dissemination activities
Learning Design

E-learning is still in its infancy. This can be seen in the books in the limited pedagogical quality and lack of portability of e-learning content, and in the lack of user-friendliness to exploit the opportunities created by current technologies. To be successful, e-learning must offer effective and attractive courses and programmes to learners, while at the same time providing a pleasant and effective work environment for staff members who have the task to develop course materials, plan the learning processes, provide tutoring, and assess performance.

To overcome these deficiencies, the IMS Global Learning Consortium has released the Learning Design Specification in 2005. IMS learning design is a set of rules and processes that provides a structured and systematic framework for creating, distributing, and delivering learning materials.

In this handbook, Koper and Tattersall have put together contributions from members of the so-called "Valkenburg Group," consisting of 25 experts deeply involved in e-learning and more specifically learning design. The result is a rich and useful source of information for both e-learning course and tool developers, providing information about the specification itself, how to implement it in practice, what tools to use, and what pitfalls to avoid. The book is not just reports on experiences, but also broadly goes beyond the current state of the art by looking at future advancements and innovative applications.
TELCERT

Technology Enhanced Learning: Conformance - European Requirements & Testing
Key Aspects of the Project

- A Model for Conformance
- Application Profiles
- Application Profiling Tool
- Content Re-Engineering Tool
- Testing Technology Research
- Test Suite Architecture
- Key Deliverables
- Outreach Workshops
LD RTD

- Work of PhD students (see dspace server), mostly on extensions or implementations
- Work on LD automatically generated, reusable LD patterns
- Validation of pedagogical expressiveness requirement =>
Validation

- lesson plan sites (merlot, eric lesson plans, etc.)
- random selection of 16 lesson plans
- Expert designers:
  - expert analysis: judge how difficult to model
  - document analysis
  - created LD files and noted problems
- a. do the three methods differ?
- b. possible to create the LD?
- c. difficulties?
selected lesson plans

1 Pizzaz!...tongue twisters
2 Lincoln's secret weapon
3 Jazz and Math: Rhythmic Innovations
4 Considering copying
5 The darien adventure
6 Carnival safety success
7 Exploring disability
8 Ecosystems and Well-Being
9 Kermit the hermit
10 Inventions
11 Cracking dams
12 The Works Progress Administration and the New Deal
13 Learning microsoft excel 2000
14 How do people express their faith through the arts?
15 Eyes in the Sky
16 A Pittsburgh Memory, A Memoir Study Focusing on Location
Outcome

- All could be modelled in LD
- different categories (behaviourist, cogn., soc. constructivist)
- identification of easy/difficult parts, e.g. difficult (but possible) is dynamic grouping
- .... still working on it
Events

- Unfold/Surf Six meeting Heerlen Oktober
- Unfold LD Workshop Kaunas November
- LD Workshops etc. Online Educa Berlin Dec.
- Plugfest LD tools Heerlen Febr 2005
- Online events every month
- ...
Thank You!

- www.unfold-project.net (Unfold)
- ln4ld.learningnetworks.org (Learning Network for Learning Design)
- www.coppercore.org (sourceforge)
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