



# Learning Community Support Architecture

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- LC Support Architecture:
  - Pedagogical and technological infrastructure
  - Community-based portal
  - Integrates tools and resources
  - Transparent access to a repository of learning objects (LOR)
- LOR:
  - Both portal and tool-based access
  - The importance of metadata: “the COLDEX plus”
  - Reuse, retrieval, and heuristic filtering



# A tool-centred view of metadata

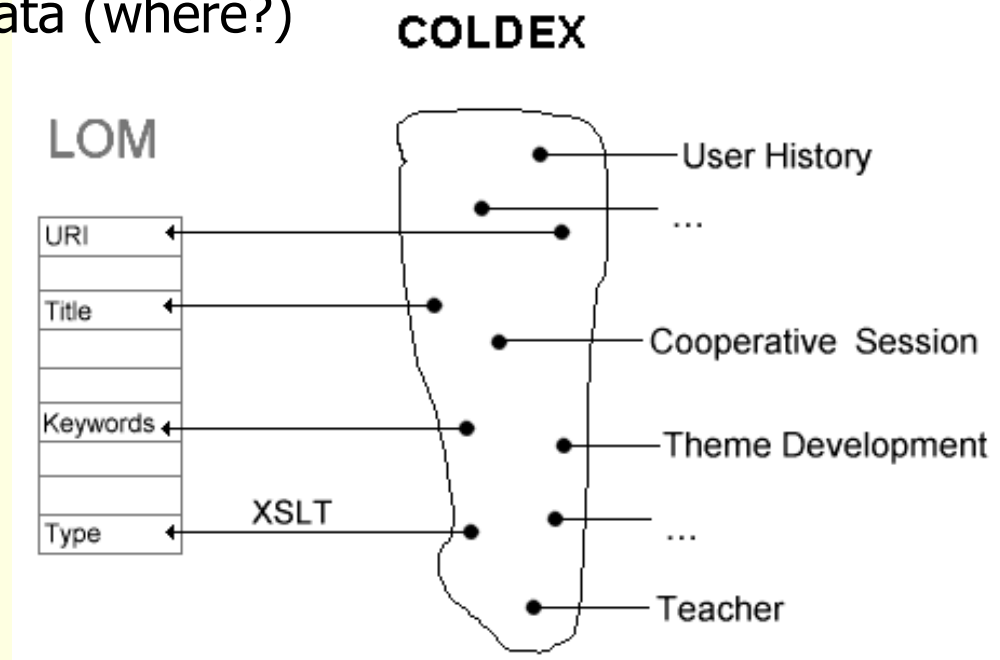
- Rich description of learning objects
  - Combination of domain-specific tools and context information
  - (semi)automatically generated metadata
  - User completes set of metadata (where?)

- Standards

- LOM, RDF, XML (XSLT, SVG)

- Reuse of these standards

- Extend LOM to fit COLDEX
- Enlarge RDF vocabulary
- Map a subset of COLDEX metadata by XSLT to LOM
- Support preview of learning objects as SVG





# User Search/Browse Interface

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- Flexible search functions and refined retrieval
  - Cover complex queries
  - Search using variations of retrieved LOs
- Preselected fields
  - Possibilities for other alternatives
- Browsing structure
  - Browse and search through a folder structure
  - Store interesting queries in the repository



# Heuristic filter mechanisms

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- Basic requirements: language, topics and themes, etc.
- Presentation of automatically generated set of learning objects:
  - Weighted by the selection rules (basically required, optional)
  - Tool context (e.g., model types)
  - Visualization according to individual relevance
- Weighting rules:
  - Most recent, news and updates in the user's group, etc.
  - Similarity assessed by keywords and description matching
  - Time targets (e.g., deadlines, project phases, etc.)



# Progress: where we are

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- What should have been done by now:
  - Preparatory work: TR 4 and 5
  - Deliverable 6.1.1 – network specification
- What has been done:
  - First draft of D6.1.1, delay due to:
    - The specifications includes parts of task 6.2 for which prototypes are being developed
    - Detail of treatment of use cases and metadata
- What is left to do (planning):
  - Complete D6.1.1 → covers task 6.1 and part of task 6.2.
  - Proceed with the other tasks



# Network architecture

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- UML Network specification – draft version:
  - Unifying the early UNED and Växjö use cases and functionality
  - Architectural considerations of COLDEX system:
    - Server(s) – Client architecture
    - Multiple instalations of PORTAL + LOR
    - Replicated local metadata catalogue
    - Local searches with global resource access
- Metadata representation and processing WIP



# Baseline Architecture of the COLDEX system

