

Services to Link OpenCourseWare Repositories and the NSDL

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Outline

- OpenCourseWare Repositories
- Proposed Work (NSDL)
- MOCSL Tools
- Future Steps

Open Enables Quite A Bit!

OpenCourseWare (OCW) Repositories

- OpenCourseWare started by MIT in 2002
- “Publication” of MIT providing access to course materials
- Key Aspects
 - Does not grant degrees
 - Does not provide access to faculty*
 - Course materials (content varies in depth and breadth)
 - **Licensed “openly”** (aka “open content”), using a Creative Commons Attribution-NonCommercial-ShareAlike* license
- 1550 courses published (of 1800 anticipated)
- MIT OCW, ~640,000 monthly visits (09/2006)

OCW Movement

- Movement expands outside of MIT
 - Tufts, Johns Hopkins School of Public Health, Utah State
 - MIT OCW Translation Partners in Taiwan, China, Universia (in Latin America and Europe)
 - Notre Dame, British Open University, Open University of the Netherlands
- OCW Consortium (launched 2006)
 - Over 100 members
 - Over 3000 courses published
 - www.ocwconsortium.org
- Consortium-wide, ~810,000 monthly visits (est., 09/ 2006)

eduCommons

- OpenCourseWare Management System developed at Utah State
 - Content management and publication
 - Platform for services
- Adopters
 - In production: Notre Dame, OUNL, Utah State, Wheelock
 - Pilots underway: 10-20*
 - Planned adoptions: Kyoto University (and Japan OCW Consortium), CORE (China), Universia
- Funded by Hewlett Foundation

<http://cosl.usu.edu/projects/educommons/>

Relevant Challenges and Opportunities

- Wide range of content
 - Few courses media rich
 - Fewer interactivity rich
 - A number of universities are adopting eduCommons
 - Most universities focused on content publication
- NSDL, Pathways and Learning Object Repositories have both
 - Common platform for shared solutions
 - Utah State is the “tools” and services provider to the OCW Consortium

Proposed Work (NSDL)

- Improve discoverability of courses in OCW repositories
 - Federated search of OCW repositories
 - Portal to OCW repositories
 - Harvest metadata of OCW repositories
- Improve user experience by providing a combination of rich content and context
 - Find NSDL resources from OCW repositories
 - Use OCW courses to provide context for NSDL content

OCW Metadata, Search and Portal

- “Web 2.0” approach
- Metadata
 - RSS feeds of Dublin Core metadata forthcoming for all OCW Consortium members (MIT OCW, all eduCommons adopters already doing this)
 - Richer metadata for eduCommons adopters
 - Low barrier to entry
 - Enables Utah State to build tools to enable federated search and OAI-PMH for consortium members

OCW Metadata, Search and Portal (cont.)

Select **OR** Type →

Tag Browser

management (110)	cmu (1)	video (3)
materials (37)	foothill (1)	
mathematics (72)	mit (70)	
mechanical (68)	video (4)	
media (38)		
medicine (7)		
mit (1447)		
music (14)		
nuclear (30)		
nutrition (1)		
ocean (22)		
philosophy (39)		
physics (52)		

OpenCourseWare Courses

Description	Tags
Wavelets, Filter Banks and Applications, Spring 2003	mit mathematics
Wave Propagation, Fall 2004	mit mathematics
Topics in Theoretical Computer Science : Internet Research Problems, Spring 2002	mit mathematics
Topics in Combinatorial Optimization, Spring 2004	mit mathematics
Theory of Numbers, Spring 2003	mit mathematics

<http://www.opencontent.org/ocwfinder/>

And then we took a slight detour...

MOCSL Tools

- Learner support for open content
- Based on folksonomies and relational data
- “Web 2.0”
- Funded by Mellon Foundation

<http://cosl.usu.edu/projects/mocsl/>

MOCSL Tools (cont.)

- RelStore – store
- OER Finder- find
- OzmoZR – find, aggregate and share
- Send2Wiki – create derivative works
- Annorate – annotate and rate
- Pheromone – sequence
- Didily – relate

MOCSL Tools (cont.)

- RelStore – store ✓
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Brief Demo

- Diddly – relate
 - Describes relations between websites, uses folksonomic descriptions, stored in RelStore

<http://scrumdillyumptio.us/>

- OzmoZR – find, aggregate, share
 - Build online identity, share information, social filtering

<http://ozmoZR.org/>

Future Steps: Metadata, Search and Portals

- Update OCW Finder→OER Finder
- Develop federated search across eduCommons repositories and RSS-harvested metadata
- Build and expose web services
- Setup OAI Provider for OCW Metadata (probably)

Future Steps: Content and Context

- Collect metadata on courses and learning objects
- Sequence and store data in MOCSL Tools
- Build recommender system (LO→Course and Course→LO)
- Build and expose web services
- Test at eduCommons sites
- Test at MERLOT, NSDL

Questions?

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