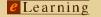# Open Educational Practices and Resources

Presentation at the OECD-CERI
Second Export Meeting on OER
Barcelona, 26-27 October 2006

Guntram Geser and Veronika Hornung-Prähauser,
Salzburg Research - Austria
Viola Naust, FernUniversitaet Hagen - Germany

Overview

- Basic project information

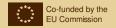- Project philosophy and objective

- Status of ongoing project activities

I. Project basic information

OLCOS
Open eLearning Content Observatory Services

- OLCOS is a Transversal Action funded by the European Commission under the *e*Learning Programme

- Duration: January 2006 – December 2007

- Budget: 373.263 € (279.947 € funded EU)
- Project partners
  - European Centre for Media Competence, Germany
  - European Distance and E-Learning Network, Hungary
  - FernUniversitaet in Hagen, Germany
  - Mediamaisteri Group, Finland
  - Open University of Catalonia, Spain
  - Salzburg Research Ltd., Austria = project co-ordinator

- Website: www.olcos.org

Co-funded by the EU Commission   *e*Learning

Project co-ordinator

salzburg|research

- Interdisciplinary research company
- 60 employees
- Owned by the State of Salzburg
- Technological R&D, eCulture, eLearning, socio-economic impact
- e.g. EduMedia Group: Focus on didactial innovation,
- For example:

  e-portfolios for competence based learning,

  development of semantic social software for group/community learning,

  monitoring and evaluation of European trends in „smart content tools" for Education and Culture

  www.salzburgresearch.at

Co-funded by the EU Commission

eLearning

Establish a virtual (online) *information and observation service* for promoting

- *the concept,*
- *the production and*
- *the usage of open educational resources,*
- *with special respect to* **open (e-)learning practises using open digital educational content**

Open eLearning Content Observatory Services

- **Focus on the development of self-organised learning and digital competencies/skills for the knowledge society – students and teachers**

- **OER is <u>firstly</u> about <u>open</u> educational <u>practices</u> for such development**

- **Open Content is a means to this end, i.e. supporting the need to change current educational practices**

- **Simple delivery of OER to teacher-centred "knowledge transfer" education does not make for a change**

Co-funded by the EU Commission

eLearning

III. Education yesterday - today

Image sources:
http://www.uni-leipzig.de/cumpraxi/img/hoersaal_410.jpg
http://www.difaem.de/index.htm?/100Jahre/bildergalerie_geschichte.htm
http://www.bslonline.de/images/raum3e1.jpg

Co-funded by the EU Commission

eLearning

Source: Wim Veen 2005

Multi-media competent and multi-tasking learners

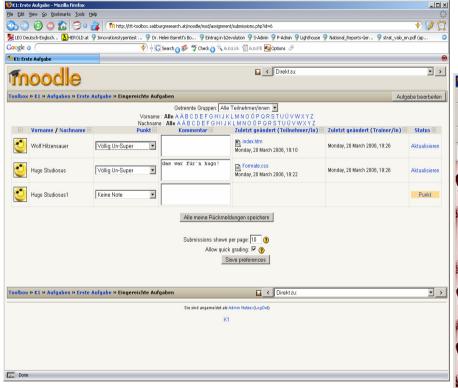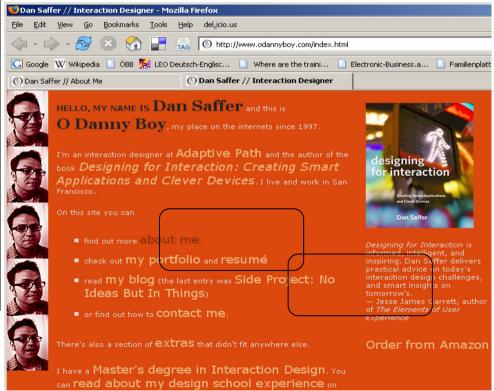"Highly media competent learners - learning informally"

III. Learners become active web-publishers

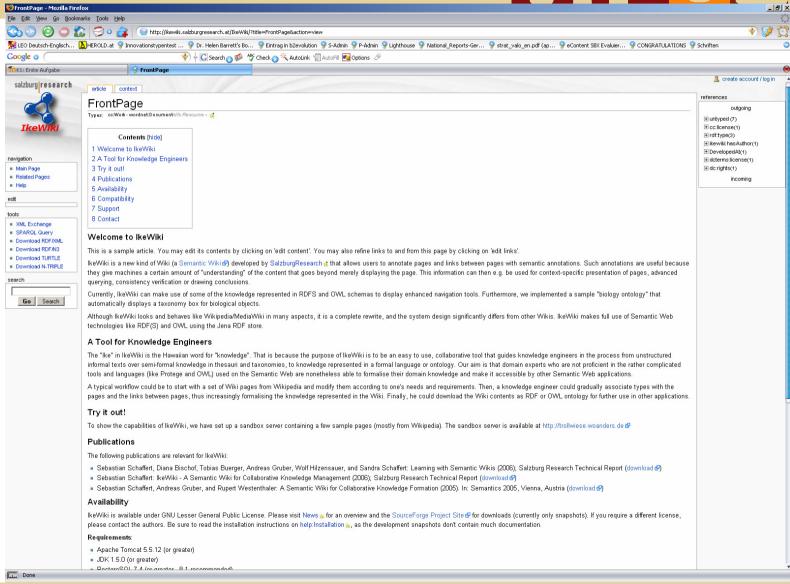OLCOS - Open eLearning Content Observatory Services

III. Web-based e-portfolios

OLCOS - Open eLearning Content Observatory Services

FrontPage - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://ikewiki.salzburgresearch.at/IkeWiki/?title=FrontPage&action=view

LEO Deutsch-Englisch... | HEROLD.at | Innovationstypentest ... | Dr. Helen Barrett's Bo... | Eintrag in b2evolution | S-Admin | P-Admin | Lighthouse | National_Reports-Ger... | strat_valo_en.pdf (ap... | eContent SBX Evaluier... | CONGRATULATIONS | Schriften

Google | Search | Check | AutoLink | AutoFill | Options

NK1: Erste Aufgabe | FrontPage

salzburg|research

IkeWiki

article | context

create account / log in

FrontPage

Types: cc:Work · wordnet:Document rdfs:Resource ·

navigation
- Main Page
- Related Pages
- Help

edit

tools
- XML Exchange
- SPARQL Query
- Download RDF/XML
- Download RDF/N3
- Download TURTLE
- Download N-TRIPLE

search

[Go] [Search]

Contents [hide]

1 Welcome to IkeWiki
2 A Tool for Knowledge Engineers
3 Try it out!
4 Publications
5 Availability
6 Compatibility
7 Support
8 Contact

references

outgoing
- untyped (7)
- cc:license(1)
- rdf:type(3)
- ikewiki:hasAuthor(1)
- DevelopedAt(1)
- dcterms:license(1)
- dc:rights(1)

incoming

Welcome to IkeWiki

This is a sample article. You may edit its contents by clicking on 'edit content'. You may also refine links to and from this page by clicking on 'edit links'.

IkeWiki is a new kind of Wiki (a Semantic Wiki) developed by SalzburgResearch that allows users to annotate pages and links between pages with semantic annotations. Such annotations are useful because they give machines a certain amount of "understanding" of the content that goes beyond merely displaying the page. This information can then e.g. be used for context-specific presentation of pages, advanced querying, consistency verification or drawing conclusions.

Currently, IkeWiki can make use of some of the knowledge represented in RDFS and OWL schemas to display enhanced navigation tools. Furthermore, we implemented a sample "biology ontology" that automatically displays a taxonomy box for biological objects.

Although IkeWiki looks and behaves like Wikipedia/MediaWiki in many aspects, it is a complete rewrite, and the system design significantly differs from other Wikis. IkeWiki makes full use of Semantic Web technologies like RDF(S) and OWL using the Jena RDF store.

A Tool for Knowledge Engineers

The "Ike" in IkeWiki is the Hawaiian word for "knowledge". That is because the purpose of IkeWiki is to be an easy to use, collaborative tool that guides knowledge engineers in the process from unstructured informal texts over semi-formal knowledge in thesauri and taxonomies, to knowledge represented in a formal language or ontology. Our aim is that domain experts who are not proficient in the rather complicated tools and languages (like Protege and OWL) used on the Semantic Web are nonetheless able to formalise their domain knowledge and make it accessible by other Semantic Web applications.

A typical workflow could be to start with a set of Wiki pages from Wikipedia and modify them according to one's needs and requirements. Then, a knowledge engineer could gradually associate types with the pages and the links between pages, thus increasingly formalising the knowledge represented in the Wiki. Finally, he could download the Wiki contents as RDF or OWL ontology for further use in other applications.

Try it out!

To show the capabilities of IkeWiki, we have set up a sandbox server containing a few sample pages (mostly from Wikipedia). The sandbox server is available at http://trollwiese.woanders.de

Publications

The following publications are relevant for IkeWiki:

- Sebastian Schaffert, Diana Bischof, Tobias Buerger, Andreas Gruber, Wolf Hilzensauer, and Sandra Schaffert: Learning with Semantic Wikis (2006); Salzburg Research Technical Report (download)
- Sebastian Schaffert: IkeWiki - A Semantic Wiki for Collaborative Knowledge Management (2006); Salzburg Research Technical Report (download)
- Sebastian Schaffert, Andreas Gruber, and Rupert Westenthaler: A Semantic Wiki for Collaborative Knowledge Formation (2005). In: Semantics 2005, Vienna, Austria (download)

Availability

IkeWiki is available under GNU Lesser General Public License. Please visit News for an overview and the SourceForge Project Site for downloads (currently only snapshots). If you require a different license, please contact the authors. Be sure to read the installation instructions on help:Installation, as the development snapshots don't contain much documentation.

Requirements:

- Apache Tomcat 5.5.12 (or greater)
- JDK 1.5.0 (or greater)
- PostgreSQL 7.4 (or greater - 8.1 recommended)

Done

eLearning

III. Semantics inside

OLCOS - Open eLearning Content Observatory Services

OLCOS - Open eLearning Content Observatory Services

Co-funded by the
EU Commission

eLearning

Open eLearning Content Observatory Services

- Active, constructive and collaborative engagement of students with relevant, "real world" questions

- Teachers as facilitators/"coaches" of learning processes and experiences

- Part of such processes and experiences is to identify, share, reuse and enrich OER

- Teachers and students contribute own ideas, study results, lessons learned

Co-funded by the EU Commission

eLearning

Open eLearning Content Observatory Services

- OER as an evolving Web of openly and easily accessible resources (content, tools, services…, also other than typical "courseware")

- Important role of a new generation of tools and services ("social software") such as wikis, weblogs, RSS-feeds, bookmarks/content sharing, social networking,…

- Learning environment often self-managed by individual and groups of learners

- E-portfolios to document, reflect, and present learning progress and results

Co-funded by the EU Commission

eLearning

Open eLearning Content Observatory Services

- 1. Road-mapping to provide orientation & recommendations

- 2. Web-based services: OER awareness video, OER tutorials and examples of best practice

- 3. Co-operation with other projects and communities of practice in OER

- 4. Dissemination of information and "OER evangelism"

Co-funded by the EU Commission

eLearning

IV.1: Road-mapping activity

(1) Aims

- Explore how OER can make a real difference in teaching and learning
- Identify drivers & enablers and stumbling blocks
- Provide a set of recommendations for decision makers on required actions
- Decision makers includes teachers and learners!

(2) Focus

- Broader than Higher Education
- Open practices not "canned products"
- Time-horizon until 2012

(3) The Roadmap (about 150 pages) will become available in November 2006

(4) Below some findings (but see the full Roadmap for supporting observations, data and examples) …

Co-funded by the EU Commission

eLearning

RM-1: Policies and business models

(1) Drivers & enablers

- Growing high-level recognition of the importance of OER, e.g. in lifelong learning agendas
- Healthy competition in providing OER ("latecomers" will need to convince through highly useful OER; active user communities may be of critical importance)
- Breakthrough of the open access principle in academic publishing
- Ever more funding bodies require that project results are made openly accessible

(2) Stumbling blocks

- Business models in OER are tricky; the right mix of income streams must be found
- Growing competition on scarce funding resources (also within institutions)
- Difficulty to find a balanced approach for open and commercial educational offerings (entrenched interests of educational publishers)
- Possible implementation of rigid DRMS by many organisations (incl. Royalties Collecting Societies, Cultural Heritage institutions,…)

OLCOS - Open eLearning Content Observatory Services

Co-funded by the EU Commission

RM-2: Open educational practices

(1) Drivers & enablers

- Strong policy emphasis on educational innovation and organisational change

- Tremendous use of "social software" outside the educational sector, a "spill over" can have real impact (already some experimentation in the sector)

- Increasing recognition that OER repositories need active communities to thrive ("critical mass" of content is not the key for success)

- Creative Commons licensing is firmly established and increasingly used

(2) Stumbling blocks

- Lack of incentives for teachers to excel in OE practices and resources – needs institutional reward as well as training and support

- OE practices require new ways to assess individual achievement

Co-funded by the EU Commission

Open eLearning Content Observatory Services

(1) Drivers & enablers

- Free and OS software more widely used in Higher Education and Further Education institutions (use in schools needs in-house capacity building)
- Widespread tried and tested know-how in best practice distributed repositories (e.g. Open Archive Initiative metadata harvesting approach)
- Ontologies based Semantic Web applications will offer new ways to understand concepts and access resources
- New technical solutions for handling group-based Learning Designs are in the pipeline (LAMS is already trialed)
- Emerging Personal Learning Environments ("e-learning 2.0", e-portfolios)

(2) Stumbling blocks

- Ontologies and rich metadata will remain cost-intensive (e.g. LOM, educational categories are often not used)
- Need for more cooperation between tool developers and educators

*e*Learning

- **Roadmap in Draft version, ongoing expert discussion and feedback**

- **Next expert meeting at UOC UNESCO Chair in eLearning, Third International Seminar on OER: Institutional Challenges, 22-24 November 2006 http://www.uoc.edu/catedra/unesco/seminario/english/presentation.html**

- **Openly accessible at www.olcos.org (end of november)**

- **Licensed to share –**

- **Dissemination at eLearning events in Europe (Online Educa, EDEN Workshos, European Schoolnet, and others)**

Open eLearning Content Observatory Services

- **Awareness Video about benefits of open learning practices**
- **Online Guidance and Tutorials on HOW TO plan, use and share open learning practices with open digital educational content**
  - **Search/Find**
  - **Produce and modify (re-use)**
  - **Share open digital educational content (ODEC)**
  - **Publish and license**
- **Best Practice Collections (E/G/S) of:**
  - **eLearning content repositories**
  - **Institutions / initiatives with OER policy**
  - **Open content licensing approaches**
  - **Tools and standards for producing ODEC**

Co-funded by the
EU Commission

eLearning

IV.2: Tutorial: How to find Open Digital Educational Content (ODEC)

olcos
Open eLearning Content Observatory Services

OLCOS - Open eLearning Content Observatory Services

Open eLearning Content Observatory Services

1) Searching/finding ODEC

1.1 Searching ODEC with Search Engines

1.2. ODEC search with special Open Content Search Engines

1.3. Media-specific search

1.4. Searching in dedicated ODEC sites

2) Keeping up-to-date with ODEC

2.1. Internal Subscription

2.2. RSS-Feeds

2.3. Agents

Co-funded by the EU Commission

eLearning

Datei Bearbeiten Ansicht Gehe Lesezeichen Extras Hilfe

http://www.wikieducator.org/Open_Educational_Content/olcos/Tutorial1_Use_Open_Content/Searching_ODEC_with_special_Open_Content_Search_Engines

Go cc search

Kostenlose Hotmail Links anpassen Yahoo! Mail - E-Mail-P... LEO Deutsch-Englisch... Violas Wiki [Violas Wiki] Furl It LookSmart's Furl - Yo... OLCOS eGroupWare ... Open Educational Co...

Google cc search Suche PageRank Rechtschreibprüfung Abonnieren Optionen cc search

Open Educational Content/olcos/Tuto... LabSpace: CONNECT - OpenLearn LabSpac...

Viola naust   my talk   preferences   my watchlist   my contributions   log out
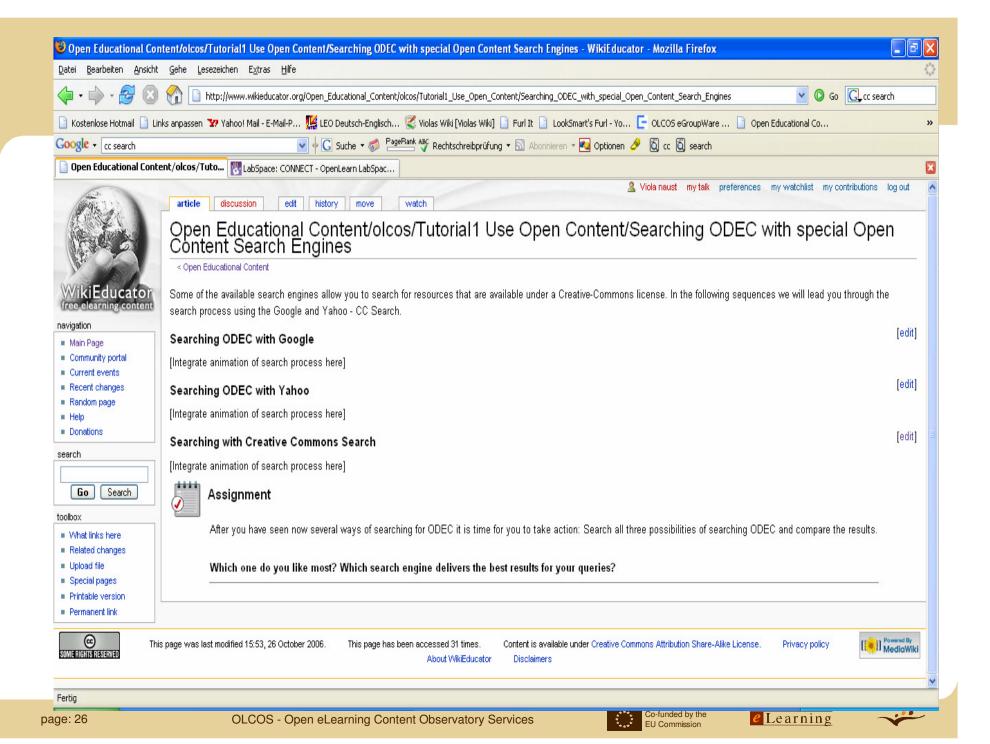
article   discussion   edit   history   move   watch

Open Educational Content/olcos/Tutorial1 Use Open Content/Searching ODEC with special Open Content Search Engines

< Open Educational Content

Some of the available search engines allow you to search for resources that are available under a Creative-Commons license. In the following sequences we will lead you through the search process using the Google and Yahoo - CC Search.

Searching ODEC with Google   [edit]

[Integrate animation of search process here]

Searching ODEC with Yahoo   [edit]

[Integrate animation of search process here]

Searching with Creative Commons Search   [edit]

[Integrate animation of search process here]

Assignment

After you have seen now several ways of searching for ODEC it is time for you to take action: Search all three possibilities of searching ODEC and compare the results.

Which one do you like most? Which search engine delivers the best results for your queries?

navigation
- Main Page
- Community portal
- Current events
- Recent changes
- Random page
- Help
- Donations

search

Go   Search

toolbox
- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link

This page was last modified 15:53, 26 October 2006.   This page has been accessed 31 times.   Content is available under Creative Commons Attribution Share-Alike License.   Privacy policy

About WikiEducator   Disclaimers

Powered By MediaWiki

SOME RIGHTS RESERVED

Fertig

V.3. Co-operation, community and user involvement

(1) www.wikieducator.org as development platform (free education material) (end of 2006)

(2) Invite users to test and adapt tutorials (between February and June 2007)

(3) Finalise tutorial production and offer information service from

- OLCOS home-page (traditional) and

- provide content in Wiki system as service, allows for integration in institutional content (open content)

IV.4. Co-operation and further development

- **Co-operation with other projects and communities of practice in OER**

- **Focus on eLearning communities**

- **Looking for funds for establishing profound training scheme (EPICT pedagogical driving license)**

www.olcos.org

Project co-ordinator / contact:
Salzburg Research Forschungsgesellschaft m.b.H.
veronika.hornung@salzburgresearch.at
Tel: +43-662-2288-405
Jakob-Haringer-Str. 5/II
A-5020 Salzburg
http://www.salzburgresearch.at

Co-funded by the
EU Commission

eLearning