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EdReNe

Expert workshop 3 on repository strategies: programme, list of participants and proceedings

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eContentplus

This project is funded under the *eContentplus* programme¹,
a multiannual Community programme to make digital content in Europe more accessible, usable and exploitable.

¹ OJ L 79, 24.3.2005, p. 1.

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Please note that the [web based version of this document](#) will be updated when relevant.

Workshop summary



The workshop took place in Sestri Levante, Italy, on the 17th – 18th September 2009.

In the opening session Lilla Voss, former expert adviser to the Danish Ministry of Education on ICT in education, gave an overview of strategic national initiatives in relation to educational repositories, and shared her visions for the schools and repository tools of the future.

A number of publishers and universities presented their strategies, content and tools. There is a clear trend towards the use of commercially available repository platforms. And nearly all repositories also contain the digital learning resources. A number of universities follow the same approach. However, in most cases the repositories need to be tailored/modified /improved further to be integrated into the universities' other systems, e.g. the repository part and the VLE part are integrated into one system for the staff and students. All higher education institutions manage their academic work in some sort of digital repository. Some stress the importance – for them and for colleagues – that the content (e.g. tools and courses) is open to the academic society.

Eugenijus Kurilovas, ITC, resumed the discussion of quality assurance by reporting about his research on evaluation criteria in the evaluation of Learning Object Repositories (LOR) and Learning Management Systems/Virtual Learning Systems (LMS/VLE).

Becta presented their vision and first concrete steps of implementation on a new Resource Discovery System that is to pool a number of previous projects and components, and provide coordinated answers to many questions which previously have been dealt with in a more fragmented approach.

Standards strategies are important. A closer link between standards developers from universities and standardisation bodies, and publishers' everyday needs must be given more attention. Becta has commissioned a project to work with content suppliers and VLE providers to define a specification for content packaging. They want to ensure that content developers use a consistent technical specification so that the content they produce can work in all VLEs.

In a group session members were asked to think of which standard has had the greatest impact on educational repository use so far, and describe why. They should also describe what they considered the most important barrier to remove within this area (and an approach for doing it!). The outcomes of these discussions have been included in the *EdReNe synthesis report on*

standards and interoperability. See

http://edrene.org/results/deliverables/EdReNeD4.3TSR_Standards_and_interoperability.pdf.

This workshop concludes the series relating to Repository strategies. The proceeding from the three workshops will serve as the primary source of input for the forthcoming thematic synthesis report on this issue.

Agenda

| Thursday, September 17 th 2009 | | |
|---|--|---|
| 9.30 | Welcome and opening | Carin Martell, International Sales Manager, Giunti Labs |
| | Introduction | Leo Højsholt-Poulsen, UNI•C |
| 10.00 | Educational repositories in perspective | Lilla Voss, Danish Ministry of Education |
| 10.30 | Coffee break | |
| 11.00 | <i>Publishing strategies:</i> Repositories and the learning experience | Mark Stiles, Staffordshire University |
| 11.45 | Hot News - brief updates from everybody on interesting new developments/projects | EdReNe members Karin, Fiona, Finn, Kadri, Henk, Rosa Maria, Adam |
| 13.00 | Lunch | |
| 14.00 | Summing up from the strategic seminar in Stockholm | Tommy Byskov Lund, UNI•C and EdReNe members |
| 14.10 | <i>Group session:</i> Current status of EdReNe and European Educational Repositories | |
| 15.25 | <i>Publishing strategies - continued :</i> Delft University of Technology: Opening up our content | Willem van Valkenburg, Delft University of Technology |
| 15.55 | Coffee break | |
| 16.15 | <i>Presentation of new members:</i> SMART technologies (continued) | Peter Claxton, SMART Technologies |
| | More hot news: | Friedhelm, Rui |
| 17.00 | The EdReNe White Paper <i>Plenum session</i> | EdReNe members |
| 18.00 | First day finishes | |
| 20.30 | Workshop Dinner | Participants |

| Friday, September 18 th 2009 | | |
|---|--|--|
| 09.00 | Administrative issues and project update | Leo Højsholt-Poulsen, UNI•C |
| 09.30 | Learning repositories quality evaluation and improvement tools | Eugenijus Kurilovas, ITC |
| 10.30 | Coffe Break | |
| 11.00 | <i>Publishing strategies - continued:</i> The Link2ICT repository model | David Farrell, Link2ICT |
| 11.30 | <i>An ecosystem for the discovery, delivery and sharing of digital learning resources:</i> Presentation of strategy Implementation roadmap | Will Ellis, Becta Andrew Kitchen, Becta |
| 12.30 | <i>Group session:</i> EdReNe synthesis reports: - Standards and Interoperability - Rights Issues - Repository strategies | EdReNe members |
| 13.00 | Lunch | |
| 14.00 | <i>Group session continued:</i> - EdReNe synthesis reports | EdReNe members |
| 15.20 | Content packaging application profile for education | Will Ellis, Becta |

| | | |
|-------|--|--|
| 15.30 | Coffee break (suggest: bring it to plenum) | |
| 15.30 | EdReNe after May 2010 - Sustainability | Leo Højsholt-Poulsen and Tommy Byskov Lund, UNI•C |
| 16.00 | Summing up on group session discussions: EdReNe synthesis reports EdReNe after May 2010 | EdReNe members |
| 16.30 | Further planning: EdReNe WS 5.3 and 4 th seminar New tools for online collaboration (?) | EdReNe members |
| 16.45 | Evaluation | EdReNe members |
| 17.00 | Seminar finishes | |

Session summaries

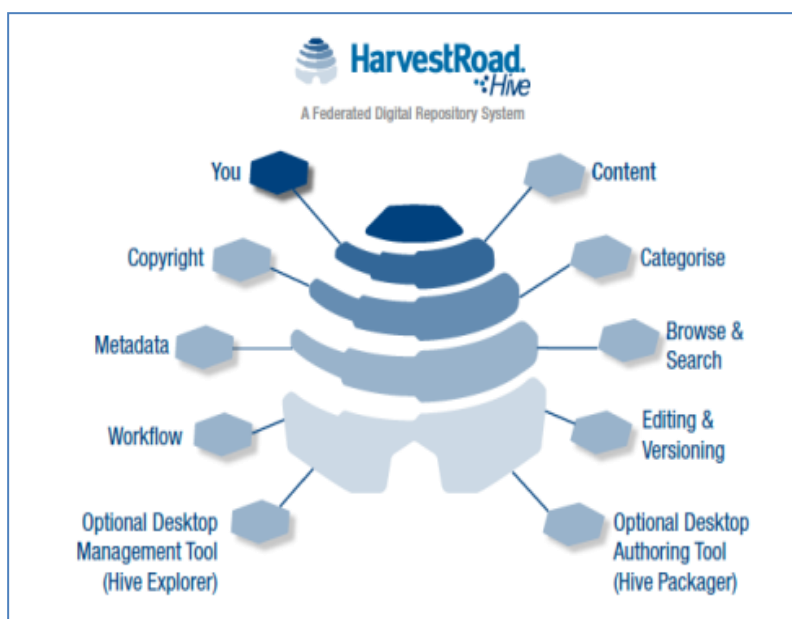
Welcome and opening

Carin Martell, International Sales Manager at Giunti Labs, co-host of the workshop, welcomed the participants to Sestri Levante, where Giunti Labs has its premises.

Giunti Labs is a member of the Giunti Group, one of Europe's oldest Educational and Cultural Heritage Publishers and a leading European K12 & Cultural Publisher.

The hot issues for Giunti Labs are Continuous education and lifelong learning, Development of new competencies and skills, Crossover between formal and informal knowledge, Co-existence of free and published contents, and Personalization of educational content offering

In 2008 Giunti acquired the digital repository, HarvestRoad Hive, which is a federated digital learning object repository. It stores and manages all types of learning, knowledge and business objects, and it handles content across different web domains. The system features a strong integration with Open Source LMS, and act as a content bridge.



Carin Martell's presentation:

<https://files.itslearning.com/data/826/open/CO3/702.pptx>

Introduction

Leo Højsholt-Poulsen introduced the work of EdReNe by presenting conclusions from the current version of the EdReNe white-book. At a later plenum session the participants discussed the white-book and its conclusions.

Educational repositories in perspective

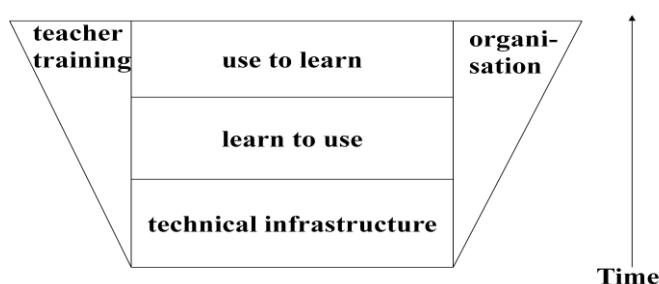
Lilla Voss, former Danish Ministry of Education

Lilla Voss has many years of experience as an expert adviser to the Danish Ministry of Education on ICT in education. She gave an overview of strategic national initiatives in relation to educational repositories, and shared her visions for the schools and repository tools of the future.

| The World | The School |
|---|---|
| <ul style="list-style-type: none"> • Media generation • ICT- users from the age of 3 • Multi (media)tasking - of course • Networking • Collaborative • Active, want to do things themselves • Like games | <ul style="list-style-type: none"> • Organisation and concept at least 500 years old • Fundamentally slow to change • Few outside competitors • Very coherent social organisation • Strong external pressure • Economic structure – artisan structure – vulnerable to rationalisation |

The pupils experience that the School contrasts the real World. However, ICT keywords for schools must now be networking, collaboration, knowledge sharing and knowledge management, and the ability to transform information into knowledge by offering children critical methods and means to combat the information overload brought about by the Internet.

Many studies show how children use ICT at school and in their spare time. They use mainly digital media in their spare time, and they learn to use digital media from other children or from experimenting themselves. They live in both physical and virtual environments, and smaller groups of children have very high ICT skills.



The diagram above illustrates the various stages of the process towards e-ready schools. Many countries have now entered the phase of “use to learn”, where ICT becomes a personal tool for the student, and teachers find new ways to organise education and learning.

VLE- LMS-LCMS systems are key factors for an e-ready school. They are used for knowledge sharing and knowledge management. They give on-line access to school resources. Communication and collaboration is interactive.

Teachers put links, examples, and demonstrations in subject folders, and they comment assignments on-line – both when they are finished and on the way. Pupils communicate and collaborate with other pupils (however, most of the time they use other chat-tools for that). Results are stored in each child’s portfolio, and teachers use learning objects from on-line repositories when they prepare lessons. They re-use pedagogical data in school administration – and vice-versa.

This is the environment that repositories have to cope with in the future. These are the users that should find repositories useful and worth while spending time on. Because teachers – sooner or later - need to adapt their teaching methods to the target groups and the new virtual environment of the school.

Which repository – which user groups

Teachers will use a national repository (national goals). Pupils may use a national repository (training modules), international repositories and other sources (search machine Google) for highly specialised interests, and national editors/subject specialists will consult international repositories to help national teachers to find good content elsewhere. So far no-one really knows what parents, who have an increasing role in the choice of learning resources, will use.

This puts the educational repositories in perspective. The whole textbook will still exist. But smaller – much smaller - modules will be in demand (e.g. Lego bricks - MIT). Repositories must target a broader group of users and provide content targeted for each of these groups. It must facilitate a pick and mix system with possibilities for the user to change and supplement with own produced content, together with a micro payment system for content not free of charge.

Lilla Voss concluded by predicting how schools look like in 2016?

- The traditional brick and mortar school will still be there
- Aged divided class concept will still be standard – but combined with cross age/cross curricular elements
- Majority of lessons will still be 1 teacher/1 class /1 subject area– but combined with group based/cross-curricular/project – oriented work and a group of teachers in collaboration
- Use of LCMS still primarily for organisational purposes – but pedagogical use increasing (class and pupil portfolios), use of LO's could be better
- *Special needs education will be dramatically changed.*

Lilla Voss' presentation:

<https://files.itslearning.com/data/826/open/CO3/698.ppt>

Repository strategies

Repositories and the learning experience - Using a Repository for Learning & Support

Mark Stiles, Staffordshire University

The university's initial drivers were to store and manage the University and SURF collection of learning resources and other associated scholarly outputs. They wanted to provide flexible delivery of e-learning content and resources, and facilitate re-use and re-purposing of learning content. They would improve archiving, auditing and version control processes, facilitate avoidance of lock-in by freeing content from vendor systems, and provide workflow for quality assurance processes, metadata, rights management, etc.

But is the VLE a straightjacket? and what are we doing with VLEs? VLE use “can” be innovative but are they creating a new orthodoxy? Do they encourage the “mundane”? Are they tying us down for the future? And are they now a barrier?

From 2005 JISC MLE “Landscape Study” of UK HE and FE consultation the document said “...the results also show two thirds of modules of study being web supplemented which

would seem to indicate that the ‘stuff your notes into your VLE’ model is prevalent and increasing”

On the “new” Web users share and collaborate. Activities are learner initiated in informal learning settings, often in diverse communities outside institutional control. It appears as an unstoppable process. In the future tutors and learners will build their own toolsets from what is provided by the institution, what they have on their own (personal) computer, and what is available on the Web. Learners will “opt out” of systems institutions and tutors might prefer them to use for formal learning activities. They might initiate “sharing” and “community” activities outside of formal learning using tools they have chosen, and engage with wider and more diverse communities.


The goals of the University Executive Business Plan 2007-2012 stimulated a University Technology Supported Learning (TSL) Plan, which includes implementing effective management of learning resources and course related information.

For a repository to manage their learning resources a consultant recommended the university to choose a commercial ‘off the shelf’ solution and use internal resources to integrate the repository with existing systems.



They should ensure that the solution can support QA etc. procedures and not impact negatively on them. They ended up selecting Hive for a number of reasons e.g. it has prime focus on being a learning repository, and it integrates excellently with VLEs, e.g. with built in for Blackboard and Moodle. They are now preparing for the big move from Blackboard to Hive.

The repository is used in the projects WBL (Work Based Learning), WBL-Way (<http://www.staffs.ac.uk/COSE/WBLWAY/>), DIVAS and ENABLE. They have organised media trials with Faculties. Migration of Blackboard content is tested, and the Blackboard integration is ready but waiting for BB and Hive upgrades. Roll-out as full service by IS being organized.

 **ENABLE** is a major university change initiative supported by JISC funding. It is focused on the complete curriculum design/development process. It is designed to connect our many initiatives and join them up without holes, and to find a way to sustain and manage innovation and change for the organization. <http://jiscenable.blogspot.com/>

In the OpenStaffs pilot project the university is committed to making a wide range of learning and teaching resources freely available and easily discovered, with the facility and rights for the content to be re-used by both educators and learners.

http://www.staffs.ac.uk/about_us/projects/openstaffs/index.jsp

Mark Stiles’ presentation

<https://files.itslearning.com/data/826/open/CO3/697.ppt>

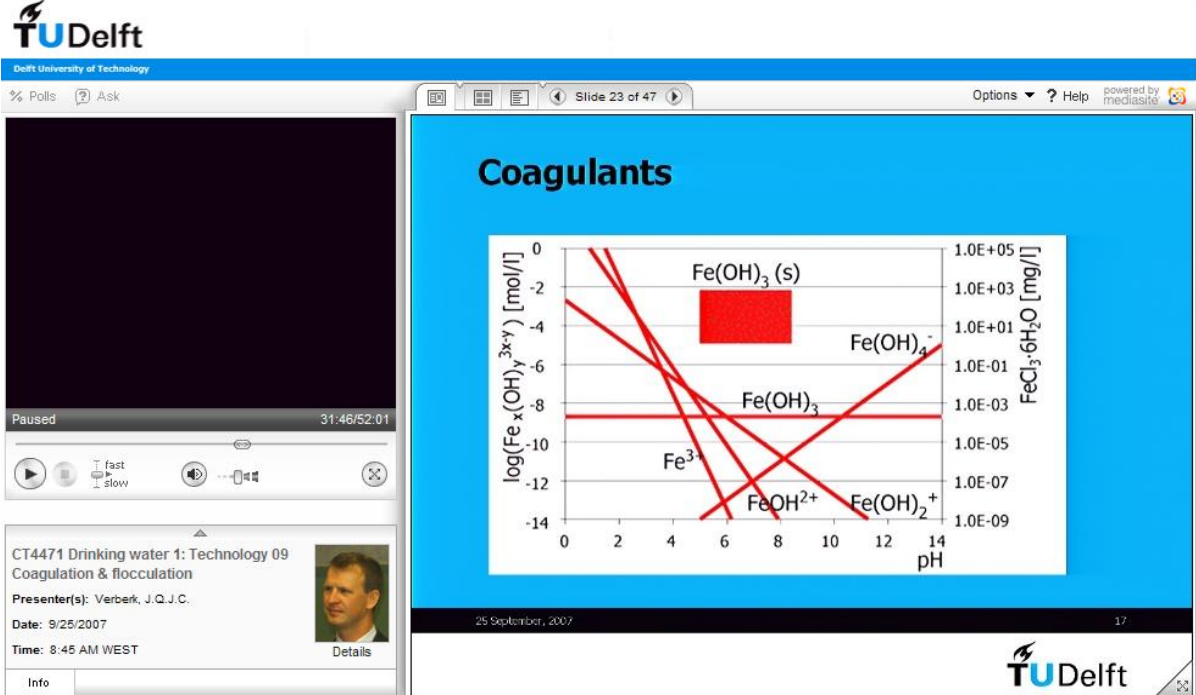
Delft University of Technology: Opening up our content

Willem van Valkenburg, Delft University of Technology

TU Delft's advantages of its repository are many. It Improves access to academic work and raises the profile of academic work. The repository guarantees the durability of data files and it reinforces the university's image as a centre of knowledge. Furthermore, it works as a counterweight against publishers. Output is visible (full text in e.g. Google) and it is accessible worldwide. The repository is a sustainable e-archive, and the number of citations/downloads increases.

Users access TU Delft research via DARE.net, the Royal Library (KB), OAISTER (Open Access Repositories) or via Google/ Google Scholar.

In its OpenCourseWare initiative the university shares its courses via OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) and its multimedia via a multimedia portal. They started because of Reputation and joining an open academic community. It is an inevitable trend and it was an opportunity to bundle faculty initiatives. The OCW Consortium now has 100 live sites with about 9,000 courses.



Coagulants

The graph plots $\log(\text{Fe}_x(\text{OH})_y^{3x-y})$ [mol/l] on the left y-axis and $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ [mg/l] on the right y-axis against pH on the x-axis. The species shown are Fe^{3+} , FeOH^{2+} , $\text{Fe}(\text{OH})_2^+$, $\text{Fe}(\text{OH})_3$, $\text{Fe}(\text{OH})_4^-$, and $\text{Fe}(\text{OH})_3(\text{s})$.

Course example.

Willem van Valkenburg's presentation:

<https://files.itlearning.com/data/826/open/CO3/696.ppt>

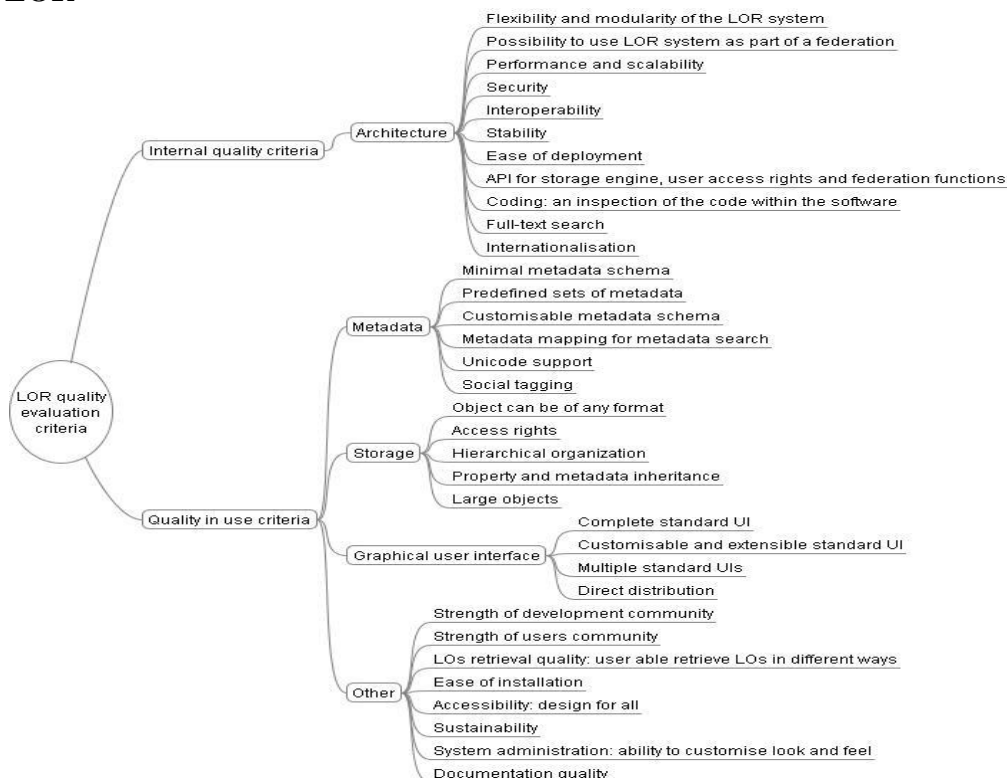
Learning repositories quality evaluation and improvement tools

Eugenijus Kurilovas, ITC

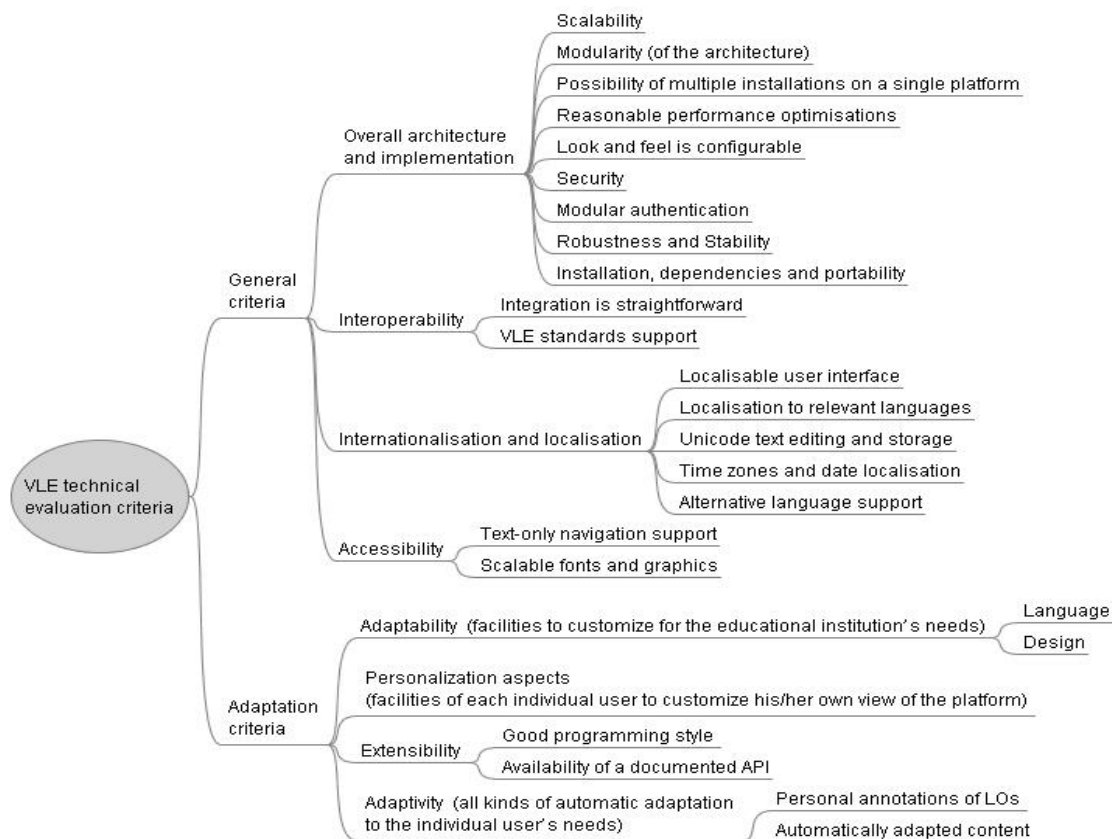
Quite a number of evaluation criteria have been applied to the evaluation of Learning Object Repositories (LORs). Existing LORs evaluation models (sets of criteria) include the SWITCH LO Repository Quality Evaluation Grid, the CatalystIT Technical Evaluation of Open Source Repositories, and the OMII Software Repository Evaluation Criteria.

Based on the research of the existing models, Eugenijus proposed two technological evaluation models, one for Learning Object Repositories (LOR) and one for Learning Management Systems.

LOR



LMS



Eugenijus Kurilovas' presentation:

<https://files.itslearning.com/data/826/open/CO3/705.ppt>

An ecosystem for the discovery, delivery and sharing of digital learning resources:

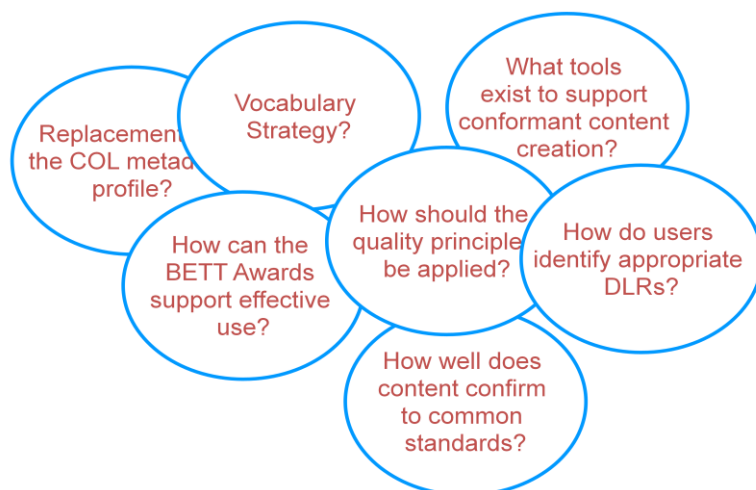
Presentation of strategy

Will Ellis, Becta

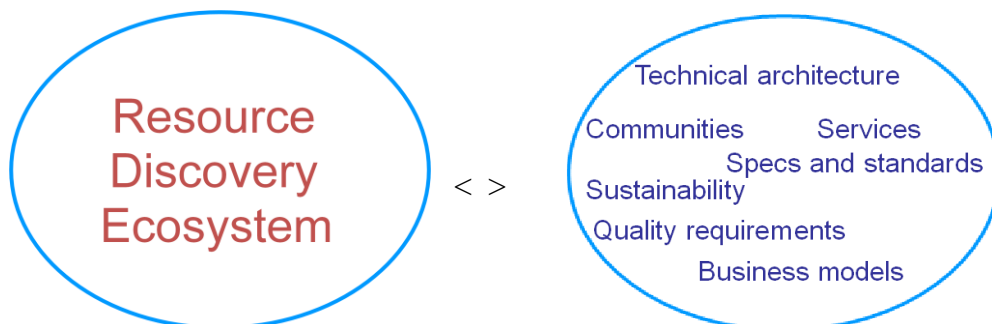
Realising that

“We need better digital resources more widely available and more flexible learning packages that teachers can adapt to their learners’ needs. We must support innovation in the market by improving our knowledge of where elearning works particularly well, and update our standards for pedagogic quality, accessibility and safety.”

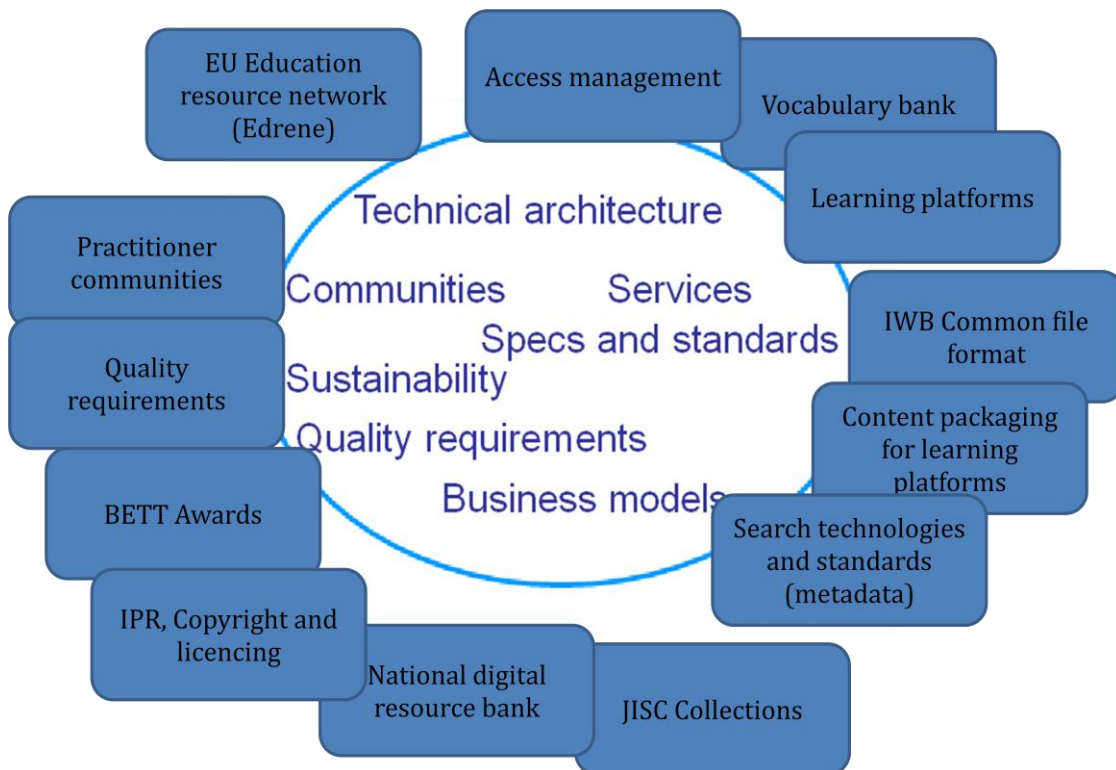
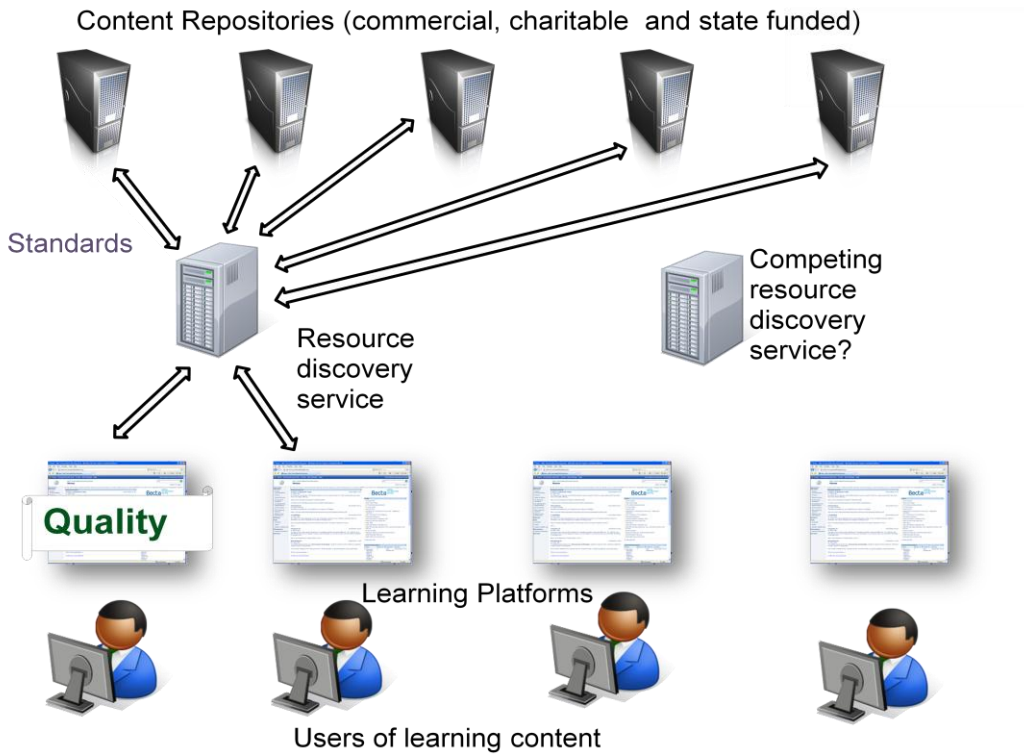
Becta launches a strategy to move from a pool of questions and initiatives



to one Resource Discovery Ecosystem



With a vision of a new structure of the setup



Will Ellis' presentation:
<https://files.itslearning.com/data/826/open/CO3/708.ppt>

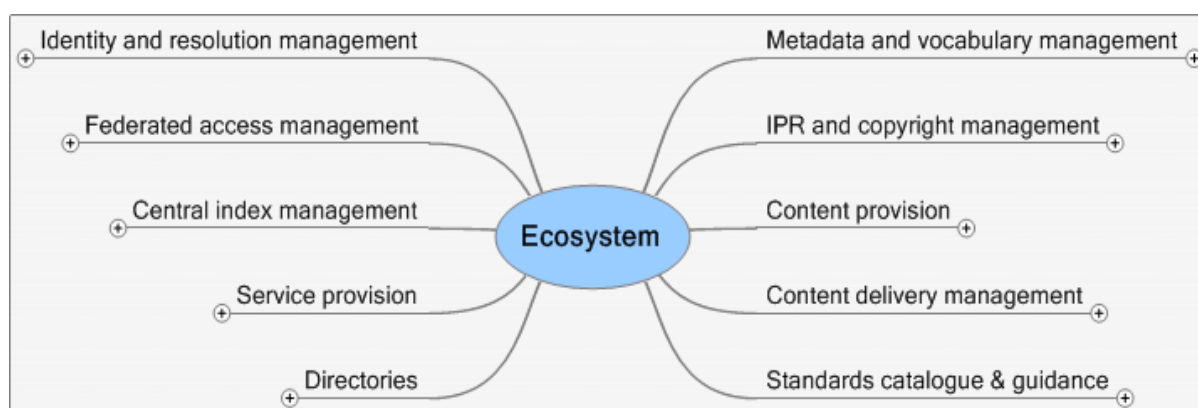
Implementation roadmap

Andrew Kitchen, Becta

The Learning Resource Ecosystem strategy was published on 28th August, 2009 (<http://industry.becta.org.uk/display.cfm?resID=41020>). Its purpose is to expand upon, contextualise and prioritise ecosystem components. It describes a flexible pathway to enable the realisation of the content ecosystem vision, delivered through a collaboration of partners and providers and shaped by the community.

The strategy takes a four phase approach. The current version focuses on phase 1, with a brief commentary for phases 2,3 and 4.

The ecosystem is analogous to a jigsaw. Without any single piece it would not be complete, and it takes time to put together in the correct way. It can be divided into ten 'pieces' or components:



Each of these ten components is being addressed by the strategy. Its vision is clear but it will be complex to implement due to the number of components involved, the coordination of stakeholders, managing expectations, maintaining momentum and many other factors!

Phase 1, the implementation phase, focuses on core components that provide the ecosystem's foundation. Piloting and refinement are the key activities at this early stage. Stakeholder engagement, relationship facilitation and leadership are crucial. Phase one comprises 12 core aims.

Proposals for non-core activities to promote the ecosystem's vision are welcomed.

Core issues

- Industry engagement, facilitation and leadership
- User engagement and communities of practice
- Provision of digital learning resources
- Intellectual Property Rights (IPR) and copyright for digital learning resources
- Persistent identity and resolution for digital learning resources
- A pilot central index of digital learning resource information
- Central index policy and management
- Federated access management
- An ecosystem standards catalogue

What's next?

Some activities have already started to deliver some of the core aims. Becta will be working in collaboration with specialists to complete other aims, and they will be launching procurement exercises to commission partners to work with us in delivering the remaining aims.

Andrew Kitchen's presentation:

<https://files.itslearning.com/data/826/open/CO3/709.ppt>

Content packaging application profile for education

Will Ellis, Becta

Becta has commissioned a project to work with content suppliers and VLE providers to define a specification for content packaging. They want to ensure that content developers use a consistent technical specification so that the content they produce can work in all VLEs currently used within the UK.

Previously Becta carried out a detailed technical analysis of learning content in the UK to find out how much content conforms to a consistent specification. This showed a significant problem and there are many content providers who have to produce content in a number of different versions to work with different VLEs.

Will encouraged international involvement in this project.

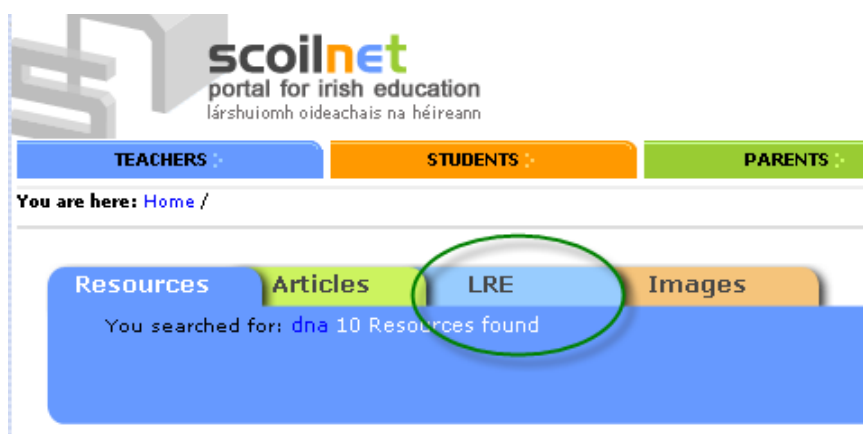
Hot News from EdReNe members

- brief updates from everybody on interesting new developments and projects

LRE search integrated with Scoilnet

(Karin Whooley, NCTE)

Karin showed the recently introduced possibility for teachers to supplement their search results from the Scoilnet resource bank with matches from the LRE (Learning Resource Exchange). No detailed analysis of usage pattern had been done so far, but initial responses showed that this was so far not highly valued and not very much used (initial feedback showed issues relating to languages, user interface)



Screenshot from scoilnet.ie showing the integration of federated search results from the European Learning Resource Exchange as a separate tab for teachers in their search result

National Digital Resource Bank launched

(Fiona Iglesias, North West Learning Grid)

Fiona handed out information material related to the launch of the National Digital Resource Bank. The repository built upon the Agrega software is now online – currently with just a little more than 500 learning objects.

See <http://www.ndrb.org.uk/>



Supporting homework with free digital learning resources

(Finn Togo, UNI•C)

Finn, responsible for the Danish national portal of learning resources (emu.dk) presented a recent government decision about launching a *free access homework support portal*. The target group is pupils in primary, secondary and vocational education and focus is on the subjects, that notoriously seem to be the most difficult to learn.

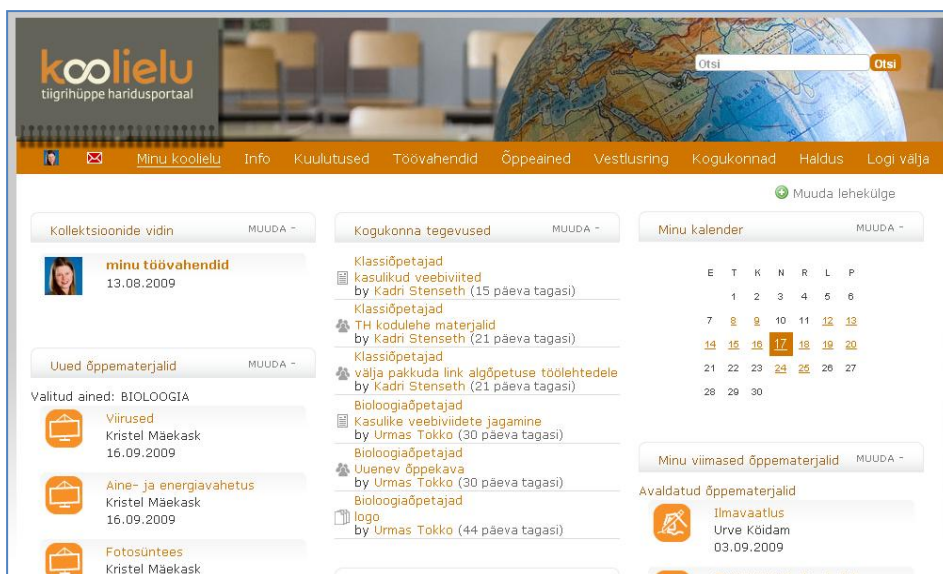
It is a 3 year project with limited financing (0.8 million euro pr. year). It might be prolonged if successful. Most of the money is dedicated to buying small digital learning modules and to searching for free modules (also international), that can be put into the portal. The modules will be stored and tagged in the national repository and brought into play through the portal,

which technically will be a presentation layer of the repository dedicated to this purpose. The expected launch date is August 2010.

Estonian educational portal

(Kadri Stenseth, TLF)

Kadri demonstrated the extensive set of web 2.0 features included in the new Estonian educational portal (see <http://koolitaja.eenet.ee>) which to a much higher degree than the previous version is based on user contributions and community building.



The screenshot shows the user interface of the Estonian educational portal. The header includes the logo 'koolielu tiigrihuppe haridusportaal' and a search bar. The navigation menu contains links for 'Minu koolielu', 'Info', 'Kuulutused', 'Töövahendid', 'Õppeained', 'Vestlusring', 'Kogukonnad', 'Haldus', and 'Logi välja'. The main content area is divided into several sections:

- Kollektsioonide vidin:** A section for collections, currently showing 'minu töövahendid' (my work materials) from 13.08.2009.
- Kogukonna tegevused:** A section for community activities, listing various educational materials and resources, such as 'Klassiõpetajad' (classroom teachers) and 'Bioloogiaõpetajad' (biology teachers).
- Minu kalender:** A calendar view showing the current date (17th) and other dates.
- Uued õppematerjalid:** A section for new learning materials, listing items like 'Viirused' (viruses) and 'Aine- ja energivahetus' (matter and energy exchange).
- Minu viimased õppematerjalid:** A section for the user's most recent learning materials, including 'Ilmavaatlus' (weather forecast).

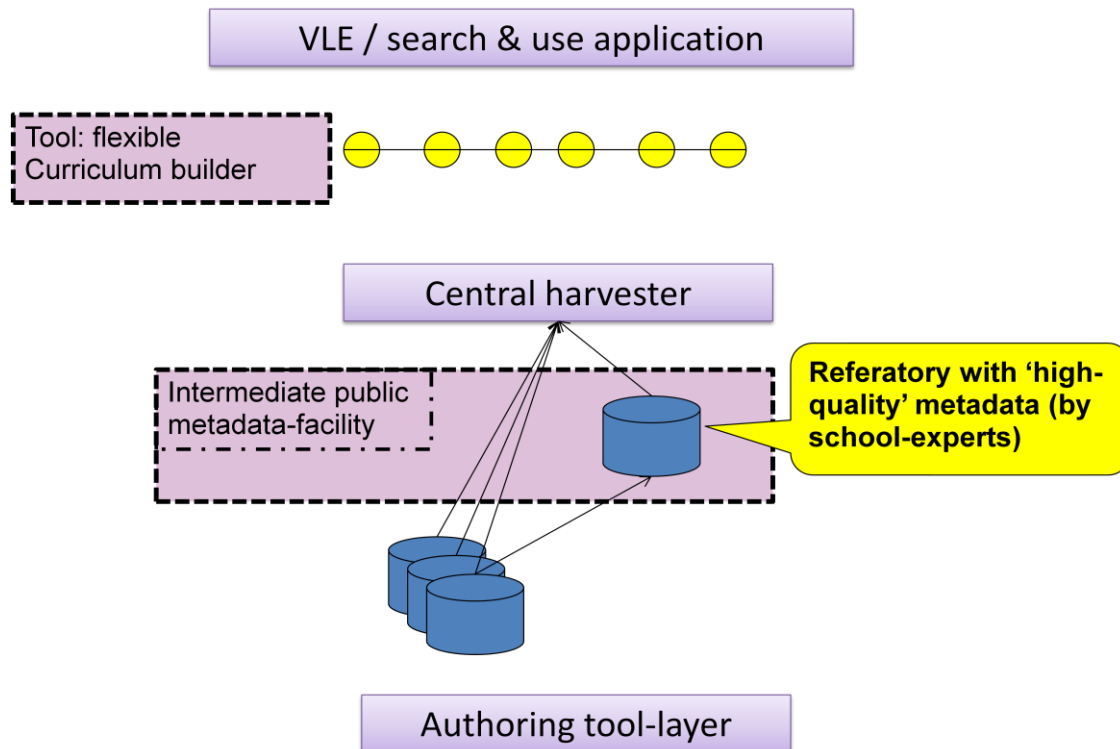
Kadri Stenseth's presentation:

<https://files.itslearning.com/data/826/open/CO3/706.ppt>

New additions to tcontent value chain?

(Henk Nijstad, Kennisnet)

Henk described the introduction of two new "layers" to the content value chain. One component should manage the resolution of different descriptions of the same learning resource ensuring that end users get the most valuable and extensive set of metadata for a given resource – today this is often not the case. A second component - not developed but where there seems to be a need - is a tool to flexibly build a curriculum together with relevant resources. The idea should be to share not individual learning resources but rather how (innovative) teachers integrate technology and digital learning resources in the entire curriculum.



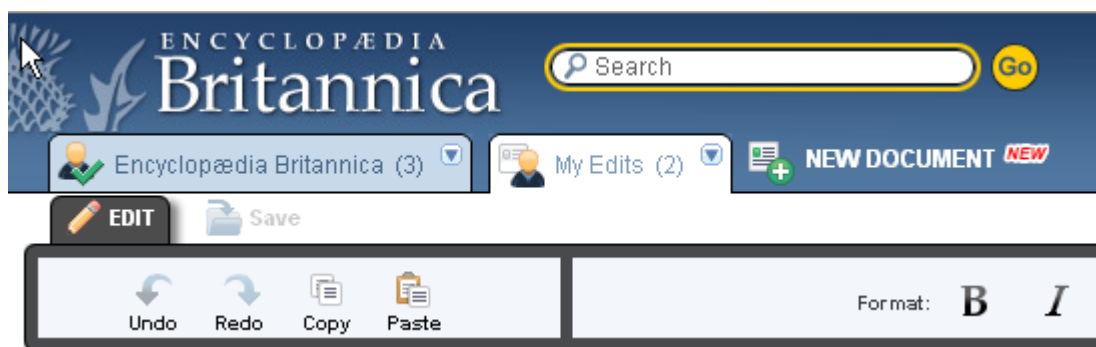
Henk Nijstad's presentation:

<https://files.itlearning.com/data/826/open/CO3/710.ppt>

Contribute to Britannica with online tools – a trend for online encyclopaedias?

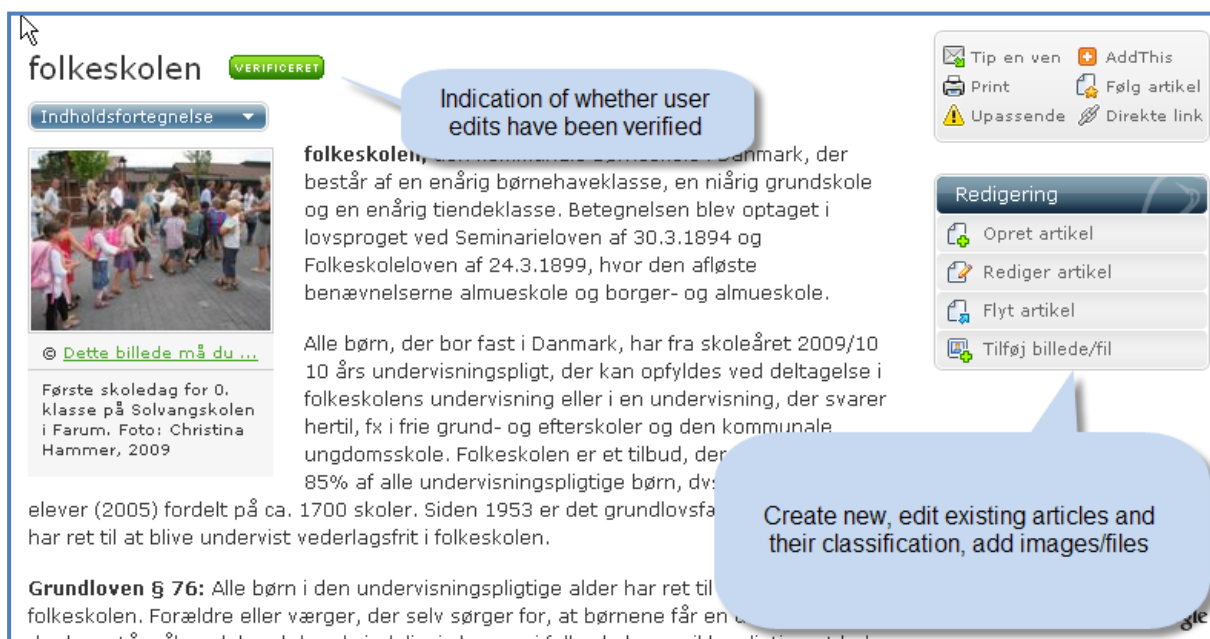
(Adam Bates, Encyclopaedia Britannica Education)

Adam did a brief demonstration of the interface allowing users to interact with existing content and supplement it with their own additions, currently available in the consumer edition of Britannica, with plans to include (possibly a tailored version) in the schools edition. There is however some hesitation as one of the main selling arguments is the validity of the information.



Screenshot from britannica.com showing the recently included possibilities for editing and sharing content

Other examples of online encyclopaedias with a similar approach were mentioned. The following screenshot is from the Danish National Encyclopaedia which has also recently become available online in a free version allowing end users to contribute to the content.



folkeskolen VERIFICERET

Indholdsfortegnelse

folkeskolen, er en skole i Danmark, der består af en enårig børnehaveklasse, en niårig grundskole og en enårig tiendeklasse. Betegnelsen blev optaget i lovsproget ved Seminarieloven af 30.3.1894 og Folkeskoleloven af 24.3.1899, hvor den afløste benævnelserne almueskole og borger- og almueskole.

Alle børn, der bor fast i Danmark, har fra skoleåret 2009/10 10 års undervisningspligt, der kan opfyldes ved deltagelse i folkeskolens undervisning eller i en undervisning, der svarer hertil, fx i frie grund- og efterskoler og den kommunale ungdomsskole. Folkeskolen er et tilbud, der omfatter 85% af alle undervisningspligtige børn, dvs. elever (2005) fordelt på ca. 1700 skoler. Siden 1953 er det grundlovsfastsat, at alle børn har ret til at blive undervist vederlagsfrit i folkeskolen.

Grundloven § 76: Alle børn i den undervisningspligtige alder har ret til at blive undervist vederlagsfrit i folkeskolen. Forældre eller værger, der selv sørger for, at børnene får en tilsvarende undervisning, der kan et så mål med hvad der almindeligvis kræves i folkeskolen, er ikke pligtige at lade sig forstyrre af den offentlige skole.

Annotations: Indication of whether user edits have been verified

Annotations: Create new, edit existing articles and their classification, add images/files

Annotations: Tip en ven, AddThis, Print, Følg artikel, Upassende, Direkte link

Annotations: Redigering, Opret artikel, Rediger artikel, Flyt artikel, Tilføj billede/fil

Screenshot from denstoredanske.dk adopting a similar strategy for including user generated content

Different presentation formats for the same learning resources

(Friedhelm Schumacher, FWU)

Friedhelm showed an example of using different presentation formats for different target groups – in this case teachers and students. The repository Mauswiesel (part of Bildungsserver Hessen) targets students, but from any search result there is a link at the top right corner leading to the corresponding page in the repository targeting teachers.



Mauswiesel-Hessen

Online-Lernarchiv, Kontakt, Impressum

Suche

> start > mathematik > geometrie > körper

Mathematik Körper - Kugel, Würfel, Quader...

Würfelnetze Klasse 3-4

Findest du im Würfelnetz die Fläche, die der farbigen Fläche gegenüber liegt?

HIER GEHT ES ZUR SEITE

Annotations: Link to teacher version of this search result

The student descriptions only include title, brief description and ratings; whereas the metadata targeting teachers include a much more elaborate description, as shown in the example below. This example also illustrates the need to often have different titles and descriptions depending on the target audience.



Bildungsserver Hessen
Unterrichtsmaterial :: Online-Lernarchive

Start | Über uns | **Unterricht** | Lehrerbildung | Schule | Region | LAKK *on/line* | Themen | Community | Einloggen ...

> bildungsserver > unterrichtsmaterial > grundschule > mathematik > geometrie > körper

"Geokörper" - Webquest ab 3. Klasse
Zum Material ...

Mit Hilfe dieses Webquests, erstellt von Daniela Huther, Julia Kahl, Michaela Sohn und Annabelle Zmic, lernen SchülerInnen die geometrischen Körper und ihre Eigenschaften kennen.

Lerne geometrische Körper kennen (Webquest).

Details verstecken ...

Web-Adressen

| | |
|--------------|--|
| Verweis | www.math.uni-frankfurt.de/~schreibe/WQ_Koerper/Einleitung.htm |
| Beschreibung | ../grundschule/Mathematik/Geometrie/koerper/edu_32008.html |

Weitere Informationen

| | |
|--------------------------------|---|
| Art des Materials | Webquest |
| Fach/Sachgebiet | Mathematik |
| Langtitel | Geometrische Körper |
| Schlagnworte | Grundschule · Mathematik · Geometrie · körper · Klasse · Webquest · Geokörper · |
| Medienformat | Online-Ressource |
| Zielgruppen | Schüler/innen |
| Rechte/ Nutzungsbedingungen | Frei nutzbar |
| Sprachen | Deutsch |

Formale Aspekte

| | |
|-----------------|-----------------------|
| Einrichtung | Bildungsserver Hessen |
| Einsteller/in | Kerstin Kehr |
| Letzte Änderung | 10.09.2008 17:27 |

Geometrische Körper Klasse 3-4

Lerne geometrische Körper kennen (Webquest).

HIER GEHT ES ZUR SEITE ▶▶

The Magellan Initiative - status

(Rui Falcão, EduWeb)

Rui gave an introduction to some of the aspects of the Portuguese Magellan Initiative – including the 500.000 computers made available to primary school pupils.

See for example:

<http://www.iniciativa-magalhaes.com/>
[Fact sheet \(Microsoft Word\)](#)

Summing up from the strategic seminar in Stockholm

(Tommy Byskov Lund, UNI•C and EdReNe members)

The 3rd strategic seminar in Stockholm began with presentations that put *educational repositories in perspective*

- *Beyond Textbooks*
An OECD report on digital learning resources as systemic innovation (Denmark, Finland, Iceland, Norway, Sweden) – final report December 2009
- *Europeana*
access to millions of digitized items from European museums, libraries, archives and multi-media collections
- *Kunskabshubben*
Video by teachers

Repository strategies of national broadcasters were a special theme for the seminar. Invited experts gave presentations from The Netherlands, Denmark, Sweden, Finland, and France.

The members from Slovenia, Italy, the United Kingdom and the Netherlands described how EdReNe has contributed to their work.

A number of members presented new national initiatives. Next, in group sessions members debated the current status of educational repositories in the various countries, the EdReNe white paper and the two synthesis reports on strategies and rights issues, respectively.

Eventually, Tommy took up the unfinished discussion, whether EdReNe should introduce new tools for online cooperation.

Tommy Byskov Lund's presentation:

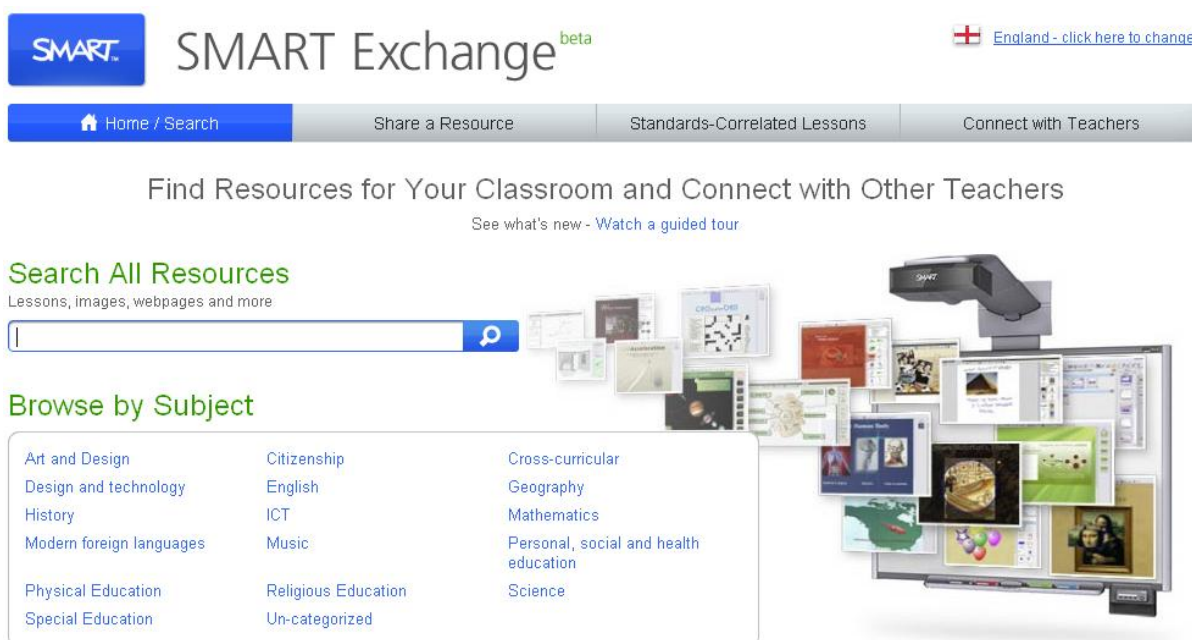
<https://files.itslearning.com/data/826/open/CO3/701.pptx>

Proceedings from the strategic seminar:

<http://edrene.org/results/deliverables/EdReNeD2.3StrategicSeminar.pdf>

Presentation of new members

Peter Claxton presented SMART Technologies with an emphasis on how they envision content sharing and exchange to become increasingly important to their strategy. A brief demonstration of the recently launched SMART Exchange platform was introduced.



SMART Exchange ^{beta} [England - click here to change](#)

Home / Search | Share a Resource | Standards-Related Lessons | Connect with Teachers

Find Resources for Your Classroom and Connect with Other Teachers
See what's new - Watch a guided tour

Search All Resources
Lessons, images, webpages and more

Browse by Subject

| | | |
|--------------------------|---------------------|---------------------------------------|
| Art and Design | Citizenship | Cross-curricular |
| Design and technology | English | Geography |
| History | ICT | Mathematics |
| Modern foreign languages | Music | Personal, social and health education |
| Physical Education | Religious Education | Science |
| Special Education | Un-categorized | |

Screenshot from exchange.smarttech.com

The EdReNe White Paper

In a plenum session participants discussed the current version of the white paper, which is available to all members in the Members zone. The discussion took its point of departure in Leo's introduction to the workshop.

The members decided to revise and update the whitepaper before it is published. Also its format and the possibility of producing a number of shorter white papers aiming at different target groups were discussed. No final conclusion was reached, except that the white paper will not be published in its present form.

Leo Højsholt-Poulsen's presentation:

<https://files.itlearning.com/data/826/open/CO3/703.pptx>

Administrative issues and project update

Leo Højsholt-Poulsen, UNI•C

All submitted deliverables are available in the Members zone, e.g. the *Annual reports* (public), the *Progress reports* (confidential, members only) and the *Proceedings* of all events (also public). The Members zone also includes all project files e.g. agreements, deliverables, addresses, output of expert workshops and an address list with the *official* and necessary address and contact person of all members (*must* be updated by all members).

The next financial statement by 1st May 2010 is also the final statement, and this means that next time we mean business. All requested procedures must be followed.

As several founding members have officially declared that they shall not spend the maximum grant allocated to them, EdReNe has money to cover travel and conference costs for those members, who participate in the events. Accordingly, from the Dutch workshop (incl.) and on UNI-C will pay all conference fees for all members, from UNI-C's budget

Leo Højsholt-Poulsen's presentation:

<https://files.itlearning.com/data/826/open/CO3/704.ppt>

Group session 1 – Current status of European educational repositories

This very brief group session served as an internal evaluation of the value of individual country sections to the current state of the art report. Groups were asked to evaluate one (or more) country sections and reflect on how these could/should possibly be rearranged in eventual future versions.

The overall feedback from groups was that even though the differences in approaches taken in different countries will also result in very different country sections a higher degree of harmonization would be useful. One more specific request was to have named contacts for the individual aspects dealt with in order to foster more peer-to-peer collaboration (e.g. on different development strategies, authentication strategies, user interface design, rights issues handling etc. etc.). Inclusion of some of the suggestions in the forthcoming thematic synthesis reports will be considered whenever possible and appropriate.

Group session 2 – EdReNe synthesis reports

This group session focused on input for the first two thematic synthesis reports on standards and interoperability and rights issues. Workshop participants were asked to discuss their reflections on the first draft of the report on "Standards and interoperability". Comments were reported directly in the document and in addition feedback was specifically collected about:

- Which standard(s) has had the greatest impact on educational repository use so far, and why
- The most important barrier to remove within this area (and approaches for doing it)
- Additional input in form of reports/surveys/projects/organizations/blogs dealing specifically with interoperability that network members have found valuable in their own work/ discussions

Finally the structure of the thematic synthesis report on Rights issues was also discussed in the same groups.

Looking and planning ahead - Workshop evaluation

Sustainability - EdReNe after May 2010

Leo Højsholt-Poulsen and Tommy Byskov Lund, UNI•C, introduced a memo circulated to all EdReNe members.

By May 2010 EdReNe finishes as a project partly funded by the European Commission. UNI•C has always, also in the proposal for EdReNe, aimed at sustainability of the network after the project has finished. Many current members, both founding members and associate members, have also expressed their interest in continuing the fruitful exchange of experiences and collaboration within EdReNe.

Possible future scenarios:

UNI•C continues, at least for 2-3 years, to maintain the EdReNe site and the EdReNe members zone.

The network arranges 1-2 seminars/workshops annually.

Coordination:

EdReNe ask the European Schoolnet to coordinate communication and arrange EdReNe's seminars.

It would be a natural thing for EUN to facilitate this as a network of European MoEs, also inviting other types of stakeholders to join. EUN may be willing to do this, e.g. in combination with its working group around the LRE (Learning Resource Exchange).

EdReNe may ask UNI•C to continue its coordination for a limited period of time.

Another EdReNe member may volunteer to coordinate the future exchange of experience.

EdReNe may link to or merge with other networks or projects.

For any option of coordination, an annual membership fee to the coordinator may be an issue.

All members cover their own costs of work and travel.

At present, we see no European Commission programme that may fund the continuation of EdReNe.

The debate among the members gave no clear indication of a preferred way forward. A group of EdReNe members are also members of the European Schoolnet, and it was suggested that the members, who were to participate in EUN's forthcoming meeting in its LRE-group, should investigate EdReNe's possible merge with an EUN sub-group. Some members advocated for a continuation of a more independent and focused group open to all stakeholders of educational repositories (in contrast to EUN being a network of European Ministries of Education).

It was decided to resume the discussion at the next workshop in November, in Linz.

Evaluation and further planning

The concluding plenary session discussed the need for increased online collaboration if the networks should prove sustainable. Twitter was discussed as an informal way of sharing ideas etc. and social bookmarking within the network member (for example using a Diigo group) was also discussed briefly. From the discussion it was evident that physical meeting will be necessary to sustain the network activity ongoing – and the motivation for increased online collaboration (i.e. not only on peer-to-peer basis) was relatively limited.

The evaluation was limited to a ten minutes oral evaluation and Q&A session. Part of this was a question as to how solid recommendations the network would be able to give concerning recommendations for repository strategies – with no evident consensus reached except for providing a list of “issues to consider”, which in every case will have to be matched with the concrete context in which the repository is being developed.

Participants

17 of 23 founding members were represented. In addition three associate members and four external experts participated – giving a total of 40 participants. Furthermore, other members of Giunti Lab’s staff participated in parts of the workshop

| Name | Organisation | Country |
|---------------------------|------------------------------------|-------------|
| Andrew Kitchen | Becta | UK |
| Christine Jack | Becta | UK |
| Will Ellis | Becta | UK |
| Jens Viggo Moesmand | BFU | Denmark |
| Rosa Maria Gómez de Regil | CNDP | France |
| Willem van Valkenburg | Delft University of Technology | Netherlands |
| Astrid Leeb | Education Highway | Austria |
| Rui Falcão | EduWeb | Portugal |
| Ricardo Santos | EduWeb | Portugal |
| Caroline Kennard | Encyclopaedia Britannica Education | UK |
| Adam Bates | Encyclopaedia Britannica Education | UK |
| Thomas Meloni Rønn | Forlaget Meloni (BFU) | Denmark |
| Lilla Voss | former Danish MoE | Denmark |
| Friedhelm Schumacher | FWU | Germany |
| Fabrizio Giorgini | Giunti Labs | Italy |
| Carin Martell | Giunti Labs | Italy |
| Alison Hudson | IML | Sweden |
| Eugenijus Kurilovas | ITC | Lithuania |
| Henk Nijstad | Kennisnet | Netherlands |
| Mark Stiles | Learning Development & Innovation | UK |
| David Farrell | Link2ICT | UK |
| Fabio Nascimbeni | Menon | Belgium |
| Nikitas Kastis | Menon | Greece |
| Karin Whooley | NCTE | Ireland |
| Fiona Iglesias | North West Learning Grid | UK |
| Christina Szekeley | Skolverket | Sweden |
| Alma Taawo | Skolverket | Sweden |
| Peter Claxton | SMART Technologies | UK |
| Kadri Stenseth | TLF | Estonia |
| Elo Allemann | TLF | Estonia |
| Finn Togo | UNI-C | Denmark |
| Leo Højsholt-Poulsen | UNI-C | Denmark |
| Tommy Byskov Lund | UNI-C | Denmark |
| Iztok Kavkler | UNI-LJ-FMF | Slovenia |
| Matija Lokar | UNI-LJ-FMF | Slovenia |
| Vladimir Batagelj | UNI-LJ-FMF | Slovenia |
| Marina Losada Yanéz | UPF | Spain |
| Silvia Losa Vidal | UPF | Spain |
| Trond Hanssen | utdanning.no | Norway |
| Elisabeth Bækken | utdanning.no | Norway |