Library of Open Educational Resources

Designing an OER Platform to Support Continuous Learning and All Educational Sectors

Anna Lindfors, project manager
CSC – IT Center for Science

Content of the presentation

- **The background** - slides 2-5
  - Education and open education in Finland

- **The service** - slides 6-10
  - what is Library of Open Educational Resources?

- **The design** - slides 11-16
  - how to design for continuous education

- **The end** - slides 17-18
  - what to take home from our experience, the good and the bad

Find the slides on the conference page for the presentation

Continue the discussion on the same page

Library of Open Educational Resources

Finnish Education System and Place for OE in it
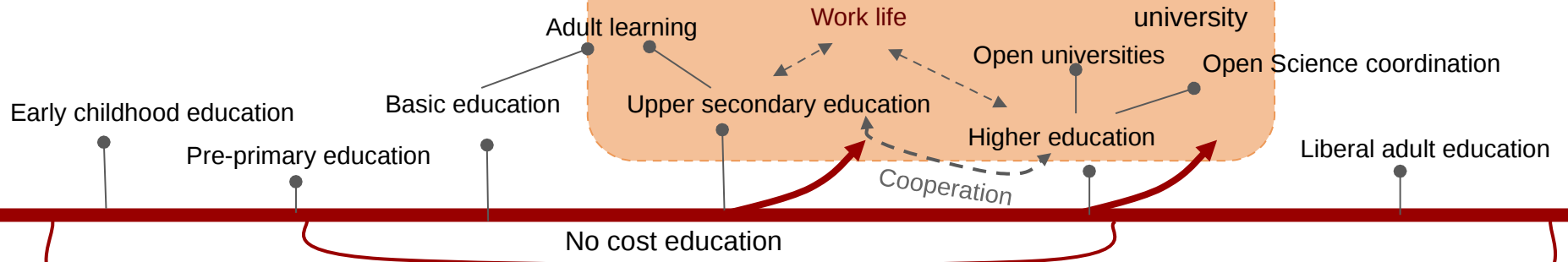
Why Open Education (OE):
- To further develop continuous learning possibilities
- To enhance teacher cooperation
- To further support cooperation between different educational institutions and different educational levels

Pekka, 56, can
- Self study using open educational resources (OER) and MOOCs
- Participate in liberal education
- Can gain further certificates cost free
- Can gain further course credits through Open university

More information on the Education System

Work life

Adult learning

Basic education

Early childhood education

Pre-primary education

Upper secondary education

Open universities

Open Science coordination

Higher education

Liberal adult education

Cooperation

No cost education

Open publication platform: Library of Open Educational Resources (aoe.fi)
Find OER, Open Science and Open GLAM provided by Finnish institutions: Finna.fi

Open Education in Finland

Expert panel in Open Education

➢ National policies and guidelines
➢ Surveying open education

Library of Open Educational Resources (aoe.fi)

➢ National OER publishing platform for all ed. Sectors
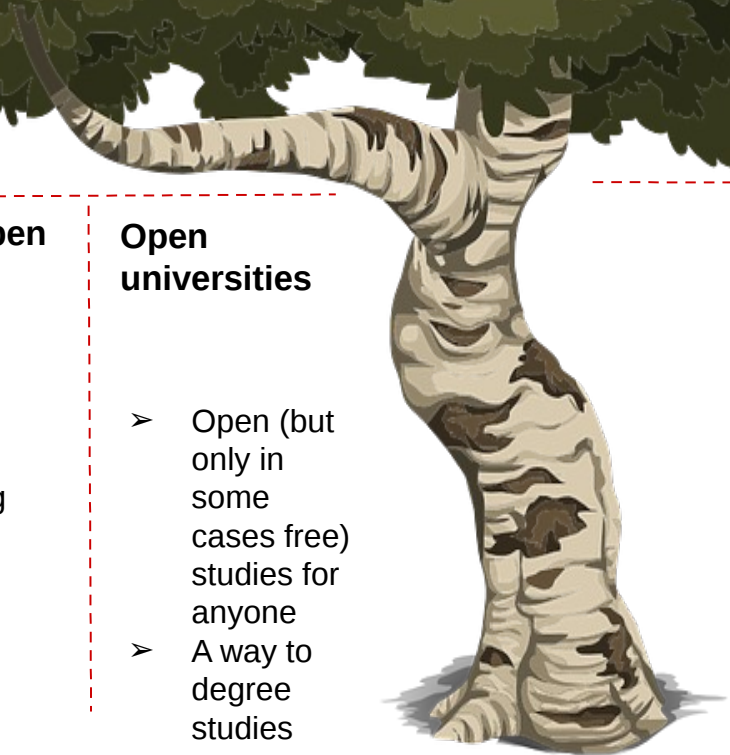➢ Directory for OER

Open universities

➢ Open (but only in some cases free) studies for anyone
➢ A way to degree studies

Libraries and the national library

➢ Support for opening up education
➢ Open access resources
➢ Finna and open heritage

Networks and working groups

➢ Networks for digital education and lifelong learning

Background for starting the service in 2018

Situation

- There are plenty high quality OER in Finland, but they are scattered and hard to find

- There are several development, vision and reformation work on all the educational levels that aim for better digitization of education

- Many publicly funded projects making OER started

- Many of the OER are underutilized due to difficulties in finding the resource and due to the culture of adaptation being new

- OER are often not interoperable

How we aim to help

- Support finding high quality learning and teaching resources, match makers to learners

- Support adaptation through easy to use and understand ways

- Enable the visions and projects to reach their goals by providing an interoperable and collaborative place to share

- Enable good metadata practices, api's and other means to allow the learning resources be where the learners are

Library of Open Educational Resources

Introduction to Library of Open Educational Resources (aoe.fi)
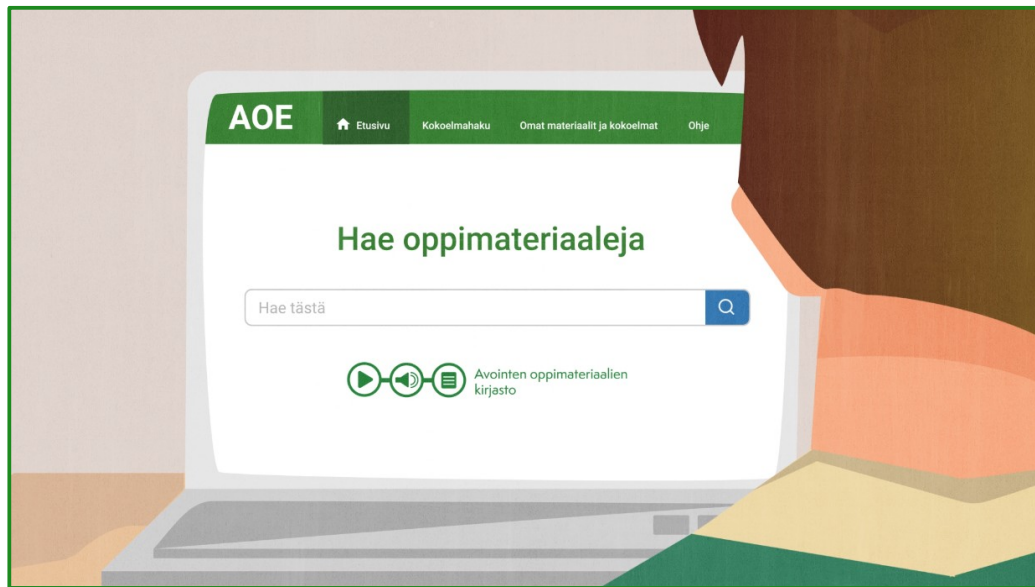
Screen capture from a showcase video of the service showing a teacher searching for OER. Avointen oppimateriaalien kirjasto (aoe.fi) -video is licensed under CC BY-ND 4.0 by CSC.

What?

- A digital library - find open educational resources (OER)
- A publication platform - share your OER for others to use and reuse
- A platform for cooperation – adapt and appraise OER
- An API to get the OERs wherever you study and work

For who?

- For teachers, professionals and mentors
- For learners in all educational sectors and continuous learning
- For joint education and cooperation

Library of Open Educational Resources

Search OER

- Basic principles:
 - Curriculum aligned OERs
    - Good creator made metadata
    - Ability to sort and filter materials
  - Ease of access and use
    - No logging in required to use the materials
    - All materials are Creative Commons -licensed and thus no need to wonder whether one can use them e.g. In class
    - Free to use for all
  - Interoperability and cooperation
    - Possibility to use OER through embed code and apis allowing easier use in f.ex. Cooperation between educational organizations
    - OER's also findable in Finna.fi where other open museum, library and archive materials in Finland are also

Library of Open Educational Resources
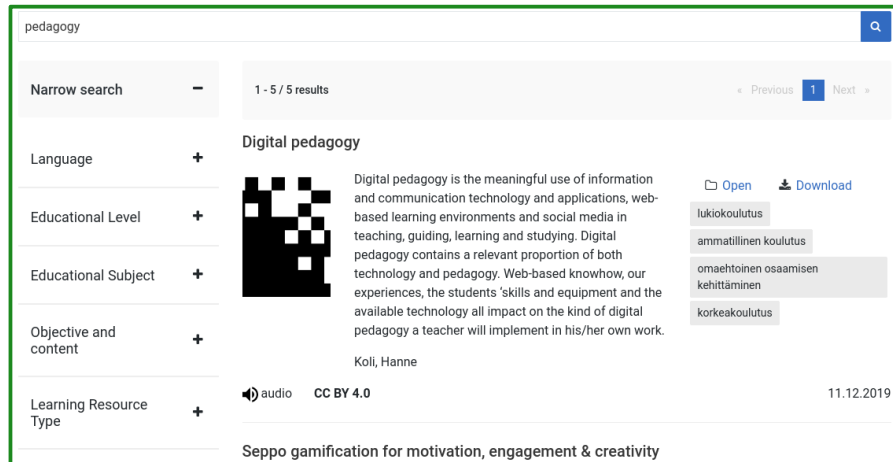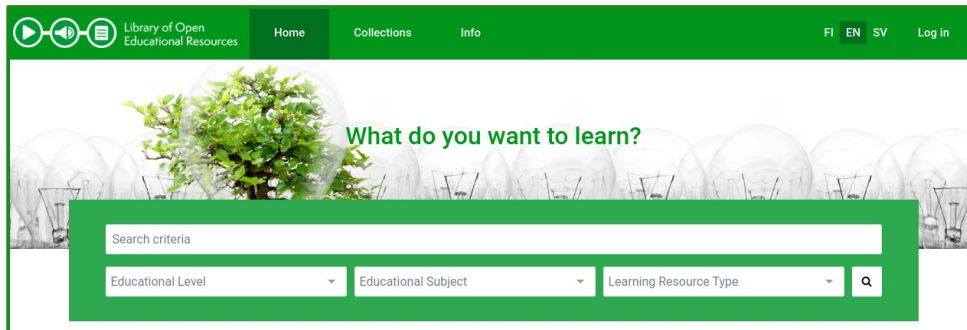
Share OER

- Basic principles
  - Ease of use
    - Support for widely used e-identification services for all educational sectors and the Finnish identification service for public administration (accessible to all)
    - Support for adding metadata
    - Shared metadata and education specific metadata
  - Enable modularity
    - One OER can have several files or links
    - Collections can be created from OER made by everyone
  - Support different ways of making OER
    - Support for many file formats

Educational Level* ⓘ

× upper secondary school

Upper secondary school
☐ Educational framework of upper secondary school 2015
☑ Educational framework of upper secondary school 2019

Educational framework of upper secondary school 2019
Educational subject

× Historia

☐ Can be used in all educational subjects

Module

× Ruotsin itämaasta Suomeksi

Learning object of upper secondary school

× osaa eritellä Suomen väestö-, sosiaali- ja taloushistoriallisen kehityksen
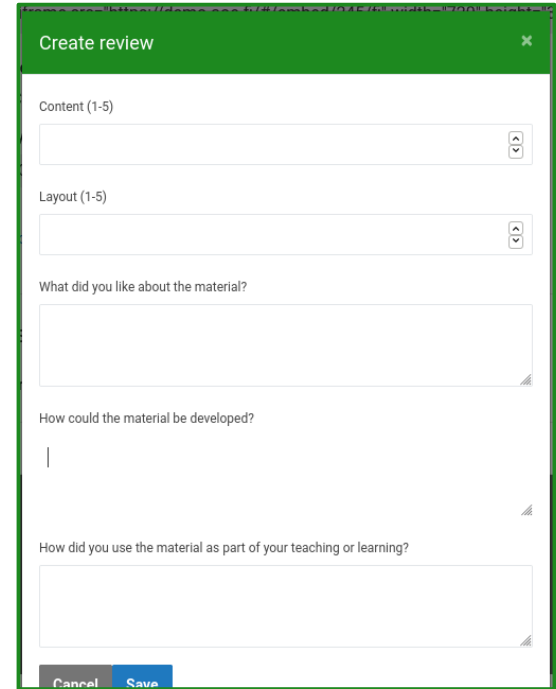
Educational content of upper secondary school

× yhteiskunta, elinkeinot, elämäntapa ja kulttuuri

Library of Open Educational Resources

Co-create OER

- Basic principles
  - Support assessing quality of OERs
    - Assessments (how used, what to improve, what was especially good)
    - Collections
  - Enable cooperation and finding synergy between educational levels and organizations
    - Adding metadata to OERs made by others
  - Know the development path
    - Version history
    - References
  - Easy to start co-creating

Create review ✕

Content (1-5)

Layout (1-5)

What did you like about the material?

How could the material be developed?

How did you use the material as part of your teaching or learning?

Cancel Save

Library of Open Educational Resources

API's and other cooperation

- One of our main ideas is to enable OERs to be where learning and teaching already is and to make it possible for the general audience to find quality learning resources when looking for information on a specific issue

- To achieve this
  - we have apis for other services to show our resources
    - One of our main cooperation partners is Finna – a service that collects most of finnish museum, archive and library metadata
  - We have embed codes for users to share resources on their sites

Library of Open
Educational Resources
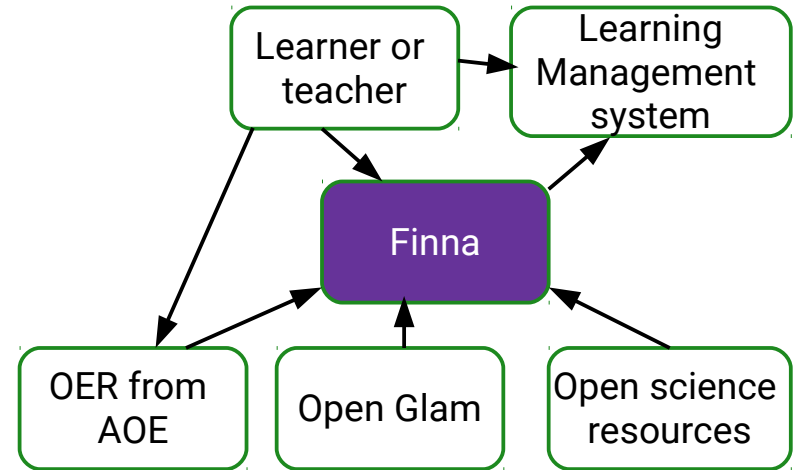
Design principles and choosing them

- Designing the Library of Open Educational Resources was started by a joint effort of early childhood education, basic education, secondary education and higher education with an emphasis on continuous and lifelong learning
  - So to start of we were making a service for a) all educational sectors b) for open materials and c) with interest of people not currently enrolled in mind
- Our design principles are pictured on the right
- The principles mean that we emphasize e.g.
  - Cooperation
  - Taking into account the needs of all the educational levels
  - Finding synergies between educational levels, organizations and teachers
  - Building API's to enable OER reaching places of learning
  - Using open licenses

Stronger together

For continuous education

Interoperability

Openly supporting open

Library of Open Educational Resources

Stakeholder cooperation

- Our owner and development teams are combined from experts from different educational levels enabling us to have on hand expertise for agile development and decision making

- Cooperating with stakeholders from different educational levels and libraries has been an important part throughout our development

- To ensure all voices are heard and there is room for finding the common ground we have had
  - Interviews, group interviews and workshops for representatives of **one educational level**
  - **Mixed** workshops for representative of **all educational levels**
  - **Open** workshops, demos and inquiries
  - Meetings and workshops with different relevant **associations and working groups**
  - Workshops and table presence in relevant **conferences**
  - Different forms of cooperation directly with **educational organizations**

Library of Open
Educational Resources

Example: metadata fields and their vocabularies 1/2

- Problem: different educational levels have different curriculum information and efforts to describe them all in a unified manner do not help people understand how the OER relates to their curriculum

- Solution: use educational specific information when possible

- We use different vocabularies for different educational levels when it comes to curriculum based information such as educational subject, module and learning objects

  - Vocabularies come straight from the national curriculums

  - When uploading a material you first pick educational levels and then get the fields of the respective levels

Educational Level* ⓘ

× upper secondary school

Upper secondary school
☐ Educational framework of upper secondary school 2015
☑ Educational framework of upper secondary school 2019

Educational framework of upper secondary school 2019
Educational subject

× Historia

☐ Can be used in all educational subjects

Module

× Ruotsin itämaasta Suomeksi

Learning object of upper secondary school

× osaa eritellä Suomen väestö-, sosiaali- ja taloushistoriallisen kehityksen

Educational content of upper secondary school

× yhteiskunta, elinkeinot, elämäntapa ja kulttuuri

Library of Open
Educational Resources

Example: metadata fields and their vocabularies 2/2

- Problem: different educational levels have different curriculum information and efforts to describe them all in a unified manner do not help people understand how the OER relates to their curriculum

- Solution: use educational specific information when possible

- In the search, by choosing an educational level, you narrow available subjects; otherwise subjects of all the educational levels are present

- Wording used is educational level specific on the upload page to avoid misunderstandings, and on the search-pages the wording tries to encompass all forms

  – This is particularly relevant for educational subject which translates to Oppiaine, tutkinto and tieteenala in Finnish

Library of Open
Educational Resources

Example: Joint entrance or separate entrances for educational levels

- Problem: people identify with an educational level and want OERs that fit their educational level with the minimum amount of steps

- Solution: search narrowing on the front page, encouraging to find suitable resources also on other educational levels
  - To make this solution we conducted several interviews and workshops.
  - The need to have a "basiceducation.aoe.fi" and similar views was not unanimous, many felt that it benefited both students and teachers that the division to different educational levels was not outright.
  - At the same time many felt that usage of the service would decline if educational level -specific views were not installed.
  - The solution was a compromise that relied on our design principle to enable synergies on different educational levels

Library of Open Educational Resources
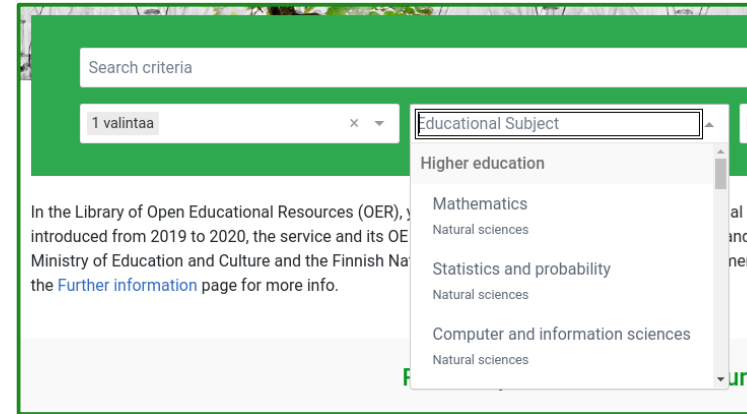
Example: cooperation with Finna

- Problem: OER are not too well known in Finland and for people who are into open materials, different open materials are scattered (e.g. open science, open glam, open education)

- Solution: Cooperation with Finna

- Finna is a service that collects metadata from museums, archives and libraries. Metadata leads to both open and not-open (or not digitized) materials. Choosing to see only open materials is easy.

- Through Finna OER find general audience better

- Finna also has organization views, so through our cooperation libraries can also show OER as part of their collection

- For learning management systems, it is easier to harvest many different types of open materials though one integration – with Finna this is possible and OER are part of it now

Library of Open
Educational Resources

What to learn form us

- Survey the field – existing differences and similarities affect new services

  – Do different educational sectors have joint language? Do they have cooperation? Have there been joint projects from which you could learn?

- Decide your approach on compromises

  – In conflict situation do you priorities one group? What is good enough? Can there be a situation that is best for everyone?

- Cooperate on every step

Library of Open
Educational Resources

Thank you!

Check out the service and find OER at aoe.fi
Get in touch with us at
oppimateriaalivaranto@csc.fi
Follow us on twitter for latest news
@aoe_suomi

Continue the discussion here at OEGlobal on the forums!

Avointen oppimateriaalien kirjasto

Picture credits:
Girl on the computer: Carlos Insignares from Pixabay
Gears: loginueve_ilustra form Pixabay
Open learner: Ba2_design form Pixabay