



OPENSNH – DEVELOPING AN OER OPEN REPOSITORY TOWARDS MOOC

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Abstract

This paper concerns the main issues of the conference and, more specifically, deals with how open repositories can offer complementary services in relation to institutional and discipline repositories. In this paper presentation, we will describe how a service could be built to fill an identified niche and how it connects to related services. The approach taken for this specific open repository, OpenSNH (www.opensnh.se), will highlight the possibilities of offering open educational resources to the entire university sector in Sweden, thereby using the resources for education in a more sustainable way.

Introduction

In the last 10 years, there has been an increased interest in sharing resources for education in a more sustainable way. One of the initiatives that has gained a worldwide response is the development and sharing of Open Educational Resources (OER), which are often provided through different forms of repositories belonging to the educational providers that have produced them. In this presentation, we will describe the development of the OpenSNH repository (www.opensnh.se) through which two Swedish Universities and the Swedish Educational Broadcasting Company (UR) have chosen to provide their OERs under thematic topics that allow for use and reuse in different ways. In the OpenSNH platform, materials are included from several other Swedish universities, based on an agreement with OpenSNH. In the development of OpenSNH, efforts were made to develop tools and didactical scaffolds in the repository, thus turning the collection of OERs and their uses towards the production of mOOCs (mini MOOCs).

Background

This paper concerns the main issues of the conference and specifically how repositories can offer complementary services in relation to institutional and discipline repositories. In the paper presentation, we will describe how a service could be built to fill an identified niche and how it connects to related services. This approach is taken for a specific open repository, OpenSNH, to highlight the possibilities for offering open educational resources to the entire university sector in Sweden and thereby use the resources for education in a more sustainable way.

The term OER was first used in 2002 by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Since then, it has gained increased attention and has been connected to different kinds of educational benefits (up to the point that *Distance Education* dedicated a special issue in 2012 to OER and social inclusion). Over the years, several issues concerning the use of OER have emerged (cf., Atkins, Seely Brown, & Hammond, 2007; Olcott, 2012). One seems to be that initially more efforts were put into the production and sharing of OERs than into looking at the successful adaption of existing materials in creating sustainable solutions for OER practices. In a recent article, Armellini and Nie (2013) propose a framework for using OERs as an open educational practice. In the article, they identify and discuss different barriers to the use and reuse of OERs. One of the key areas in their recommendations for systematic support and training for academics is in identifying relevant OER repositories, especially those containing subject-specific OER materials. In this paper presentation, we focus on one such repository in which the materials are ordered by thematic topics under different subject headings. International trends described in the *Horizon Report, 2015* (the higher education edition) provide us with options regarding “Increasing Cross-Institution Collaboration”. These options include reflecting on issues about the ways to collaborate and join in sustainable frameworks with other universities, with the goal to cooperate in OER production and build up open courses in general. The Unizin consortia (founded 2014) as an association is just one of many example with a non-profit aim based on prior metadata standards, learning analytics, etc. The NMC Academy (nmc.org) is another and different form of an organizational membership and is a global network with innovators from several universities/colleges, schools, and organizations around the world producing open mini-courses.

Developing an open repository into an mOOC

This paper presentation will describe the building of the OpenSNH repository towards mOOC (mini MOOCs) and the work of tagging the materials provided for the platform. The website OpenSNH has been created in collaboration with two commercial partners who both have experience in open source software and e-learning. The content for OpenSNH is related to a previous website for OER resources run by the network SNH, and today nine months after its launch, the site opensnh.se is in operation with 84 learning objects and four complete thematic topics.

Open source

OpenSNH was created with the open source software OMEKA.org used by several universities for teaching purposes. The OMEKA open source system has also been translated into Swedish. For the process of selecting items and OER for the themes in OpenSNH, we used the following criteria: lifecycle, provenience, originality, broadness, depth, prominence, reliability, and solidity (Commonwealth of Learning, 2011). The OER had to have previously been used in an academic educational context before or as an educational resource or in academic courses at an academic library. OpenSNH uses the resource description and metadata model Dublin Core Extended (2014).

Metadata

Using the metadata standard Dublin Core makes it easier to cooperate with partners such as the UR on the work of harvesting/importing learning objects directly into the OpenSNH repository from the UR. Educated librarians have done the work of adding metadata and search words (“tagging”) to the OER according to the standard for Swedish subject headings via the Nation Library of Sweden. So-called “enhanced metadata” have been developed using distinct and apparent images and pictograms for searching and identifying relevant resources such as videos, e-books, interactive resources, documents, quiz/tests, getting badges, etc. For better usability with mobile devices, we have chosen the theme of Berlin for OMEKA – this web interface is clean and responsive – and OpenSNH can therefore be used on all devices. OpenSNH has a search cloud for a better overview and selection of subjects and topics for the content and objects in the repository.

Together with the librarians, a collaborative routine has been established to improve the metadata and adapt this for academic learning objects that are placed in the Open SNH. The Swedish Educational Broadcasting Company can then use this improved metadata on its other websites, UR play and UR.se, and on the website UR access. Along with the Swedish Educational Broadcasting Company there are already plans to try out files by importing learning objects for radio and TV programs from UR.se to the OpenSNH. This will be more efficient and simplify and speed up the publication of learning objects from the Swedish Educational Broadcasting Company to the thematic topic pages in OpenSNH.

Accessibility

The aspect of accessibility is one criteria that we have prioritized so that both the website of the repository (OMeka) and the content (OERs) will be accessible to all students (according to 508 compliance standards). We are now investigating and testing the site with the published OERs and theme pages via the web accessibility evaluation tool WAVE. This is ongoing work to ensure that “all” learners benefit from the contents delivered via OpenSNH. We have also produced images/symbols (icons) for OERs that communicate when an OER is a video or a film, has subtext or interpretations, sign language/dactylology, and when the sound in the video is read aloud. All these special accessibility symbols and other OER symbols are open to use, share, and remix for other purposes. To allocate resources and support around accessibility is a long-term commitment to further quality assurance with the aim that nearly all learners will have their special needs fulfilled regarding searching, viewing, and learning from the OER, theme pages, and forthcoming mOOCs via OpenSNH.

mOOC (mini-MOOC)?

The name mOOC (mini-MOOC) can, as in other projects and MOOC-implementation, seem a bit of a “contradiction” in the general terms regarding MOOC. Some also call it limited open online course, or LOOC. We define mOOC as a shorter time period for learning (up to a month or so) and a more flexible variant than the traditional MOOC with a linear progression (one course module after another with quiz-type formative assignments and ending with a

summative assessment). Our aim is to create more flexible learning paths for learning by aiming at a nonlinear variant and instructional structure for the learners' progression. In this work, we have done a minor comparison matrix with several criteria that we want to share with other through EDEN. We compare a Swedish open course about the subject "source criticism" (*källkritik* in Swedish) and the OER course material you can find via OpenSNH within these fields of knowledge. The discussion is about how open MOOC is in reality when the material is locked up in a learning management system (LMS) and the learners have to authenticate themselves for the provider to use learning analytics, etc.

Integrating syllabus

The steps towards mOOC are not only a technical issue but also a pedagogical dilemma and an educational concept to discuss. If you take the side regarding the issue of a rationale, it raises several important questions about what ways we think MOOCs are sustainable. In planning, we now have to begin to investigate methods for producing a syllabus, a course schedule, and a course study guide for all courses to present activities and assessments for the theme pages and incoming mOOCs and assignments via a web tool for SALSA that creates a syllabus and flexible PDF files for building a syllabus, a course schedule, and assignments. These PDF files and the web tool are open tools with a CC-license and are part of The Open Syllabus Project. If MOOCs are just a test area to develop new examination and assessment models, is self-directed learning the central feature of MOOCs or do we create MOOCs only for the reasons that MOOCs increase institutional visibility? Or do we drive recruitment, generate income, and explore cost reductions to improve student retention? Are MOOCs just a recruitment tool or paths to other learning opportunities? What do MOOCs teach us about learning?

Use up to now

OpenSNH has shown very clear and visible results in a short time. In the work of adding content, librarians from both the universities and the Swedish Educational Broadcasting Company have been engaged in improving the quality of the metadata (bibliographic information) for each learning object, e.g., with a keyword, topic categorization, etc. This has been very successfully and will increase the searchability both on the open web using search engines like Google but also internally on the website OpenSNH. This allows different OERs to belong to specific thematic topics, depending on their content.

Based on the first period (2014) of being available, Google Analytics show that 4,745 unique visitors have accessed OpenSNH and they have collectively accessed the site 6,841 times. 32% of the visitors were returning visitors. The pages have been shown 24,637 times, with an average amount of 3.6 pages per visitor. Among the viewers on the website OpenSNH, 83% are Swedish. This shows good potential for gathering materials from different educational providers under thematic topics, and the materials attract and keep the visitors engaged. The thematic pages – theme pages about methods in science work and open digital educational resources (OER) – have been the most frequent entrance sides into the homepage of OpenSNH.

Conclusions

To summarize, the main message in this paper presentation is to demonstrate the possibility of using an open repository to gather OER from different educational providers and provide them in a thematic form for the entire higher educational system. This makes the materials more accessible and the resources for education are used in a more sustainable way. The steps towards the mOOC involve not only technical issues but also an understanding of the predicament about MOOCs' role in a broader educational context.

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