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The OER FLOW and Social Media

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ABSTRACT

This presentation introduces some strategies for producing, sharing and reusing OER through the OER Flow and social media. The aim of this investigation is to identify how colearners can apply the OER Flow and social media to make the production and adaptation processes of OER more explicit for anyone in the community to contribute. This work analyses, therefore, the interactions of "COLEARN" – an open community of research in collaborative learning technologies – who created and remixed diverse open media components for producing an open book about OER using the OER flow and Social Media. The outcomes show that educators and colearners can move from a passive position to a more active and informed network role when they are able to co-authoring OER.

INTRODUCTION

The freedom for re-using and co-creating Open Educational Resources (OER) together through the spirit of collaboration then allows the production of extremely diverse yet relevant content with millions of learners and educators acting as contributors. The aim of this paper is to introduce the OER FLOW and presenting some examples created by the COLEARN open research community.

The OER Flow was created by Leslie (2009) with the intention of helping educators develop a personal workflow around content discovery, (re)use and (re)creation. This approach was developed based on key features of the Web 2.0 as a collaborative authoring space, in which any user can create learning content collectively supported by their learning networks and their personal learning environments.

THE OER FLOW

The OER Flow is based on the metaphor of Open Educators as DJs thus creating OER by using a similar process that a DJ might use in producing music. Generally DJs interact with music in terms of finding and chopping it up, re-sequencing it and then performing it for people. These different stages describe some of the necessary steps for remixing music; each DJ, however, adapts such steps according to their own style. The OER Flow consequently adopts similar stages: search, sample, sequence, record, perform and share. Its purpose, however, is not to demonstrate the only way for producing learning content. Grounded on the meaning of "flow" as in "moving or progressing freely as if in a stream", the OER Flow aims to inspire educators to find their own style for recreating learning resources.

The key objectives of the OER Flow are to:

1. Engage users to (re)use, (re)create and then share OERs collaboratively
2. Inspire educators, content designers and learners to develop their creativity and multimedia skills for remixing educational content
3. Incorporate a "fun" element into teaching and learning primarily as a key component for a meaningful and engaging process.

The purpose of using a metaphor in this context is to organise and understand how an individual or an OER group functions. This can be really useful, particularly when using metaphors from the creative domain. When the meaning is apprehended, it can help educators identify gaps and possibilities about how they could be working, or additionally indicate what is missing. A metaphor can also introduce the important components of creativity and fun that are key elements to engage students in their learning process.

Incorporating these elements into OER production, however, is not an easy task. Educators must rethink and readapt in order to find new ways for extending and reengineering meaningful learning processes. It can leave some educators sitting on the sidelines whilst their students continue to be engaged with their "fun" informal learning. The educator may be perplexed because they seem to have to force the same students to engage with formal learning (viewed as less "fun"). This notion of using fun and creativity for educators helps them develop and deliver their learning content in more attractive and engaging ways such, that it might also help their learners facilitate their formal learning process too.

Another important aspect of the OER flow is helping educators to engage their learners in developing the skills to cope with the wealth of content that exists on the web. Each needs to learn how to develop appropriate ways of dealing with such an overload of information. The OER creator role as a DJ is, therefore, also influential as students may also want to create their own workflows to make sense of what is relevant to their understanding drawing from both formal and informal sources. The emerging world thus creates "network learners" and "network teachers" who acknowledge that learning content may not be just within the bounds of their institutions but actually spread out across the internet and often freely available. Finding and sharing creative ways of exploring both this formal world (often found within existing Virtual Learning Environments (VLEs) alongside the pervasive informal world of social networks will help both educators and learners improve their skills as well as contribute to the OER movement by widening active and creative participation around innovative open content.

It has been highlighted throughout this book, that the OER movement is based on a mixed economy of 'official' open content emerging from organisations and from learning communities. Web 2.0 also plays an important role in terms of offering an environment, tools and information for educators and learners to find, reuse, recreate and share not only such content themselves, but also improving their learning experiences, practices and feedback of existing resources i.e. content and tools.

The OER movement has some roots in the learning objects movement, and this is anchored in the notion of content using an open content centric view of learning. Its challenge, however, is not only focused on content that is increasingly freely available from many different

sources, but also the realisation that learning is not simply in the content, but it is in the engagement around the content. With this challenge in mind, it is important to reflect that focusing on content alone maybe be not enough. It is possible to underplay the amount of confidence learners need to have to become competent self-directed network learners. Educators must be cautious about centring too much on course materials and not appreciating the intrinsic requirements to scaffold or direct early learners. This network learning world and this open educational world highlights the importance of looking at how individuals, groups and communities (are) learning and engaging with content and with ubiquitous information. This is one of the primary requirements that educators need to model for their students.

Thinking about this idea in terms of open flow can help educators move from a position of a traditional instructor who may use selected content, to a more informed network instructor who delivers a much wider variety of materials to learners who may, or may not, be aware of the wealth of content that is accessible to them elsewhere.. It moves OER producers then from the role of demonstrating knowledge to that of exploring how to support learners within a ubiquitous networked content world. It also potentially moves OER students from the role of passive self-learners to active network learners who are able to manage and perform their learning within their social learning network. Students learn when they discuss and explain it to someone else. They can promote collaborative learning when they contribute to the process of creating and sharing their reflections as network learners.

CASE STUDY

The COLEARN community http://colearn.open.ac.uk
This investigation relates to the activities of the Collaborative Open Learning Community (COLEARN) an initiative directed from the Knowledge Media Institute (KMi) of the OU that commenced in 2006. COLEARN is a virtual open and online community hosted within the OpenLearn platform that brings together researchers and practitioners from across the world. The community's main interests focus on exploring knowledge media tools to facilitate a wider adoption of collaborative open learning. The aim of COLEARN is to offer a community-supported environment in which research and ideas about the use of collaborative technologies for open learning can be shared. Additionally all the emergent activities in COLEARN are available to the world as OER, as well as all the resources being shared by participants.

Based in several universities located in different countries, COLEARN community members often use FlashMeeting (a web video conference tool; see Scott, Tomadaki & Quick, 2007) to meet online, learn together and create new educational resources. Their discussions are focused on diverse open learning issues, for instance, game based environments, knowledge media and social software. Compendium Knowledge Maps are created on a variety of topics too, for example, e-democracy, thinking skills and information literacy. Community members also use Compendium to map learning material, share references, add new information from the web and include their own comments. Some of their Compendium maps show web videoconferences and their reflections about what they are studying and doing with the resources.

To illustrate some of the activities of the COLEARN community it can be noted that during the period from July 2007 to July 2010 this group, with 1714 members, produced more than 500 maps in Compendium. In addition they published more than 100 maps in OpenLearn and participated in more than 1000 web conferences in FlashMeeting.

The Compendium community http://compendium.open.ac.uk/institute/
Compendium has been used as a learning tool to link, interpret and annotate resources on the web and create open resources through not only the OpenLearn website but also a much wider and diverse community using the Compendium Institute website in both cases users can navigate, download, edit and re-upload maps.

The FlashMeeting community http://fm-openlearn.open.ac.uk
Likewise FlashMeeting (a web video conferencing tool) has a number of communities although the focus in this chapter is on the OpenLearn community installation. Flashmeeting users can book an online events by selecting the time, date, duration and indicating the anticipated number of attendees. The application generates a URL, which can then be sent to the meeting attendees. By clicking on this link, recipients gain access to the videoconference and, potentially, can reuse it in different environments. The ensuing recorded event can be edited and its URL can also be shared with others either whom participated in the FlashMeeting or more widely distributed with other non-participants. The number of attendees participating in COLEARN FlashMeeting events varied from 2 to 13 people, but the number of users in the actual community and beyond who replayed the event was significantly higher, for example, individual events were replayed from 5000 to 16548 times.

For the purposes of this study analysis is solely on the production of some OER FLOW MAPS created by four groups including those members from the COLEARN community who volunteered to attend an open online workshop centred on Reusing and Adapting OER. The online event was part of wider KMi research work that encompasses contributions from two European funded research projects that focus on "Recommendations for extending effective reuse in the Interoperable Content for Performance in a Competency-driven Society (ICOPER) project and using some of the adaptation strategies from the Skills Based Scouting of Open Content (OpenScout) project. By way of context, the following information describes the remits of both projects:
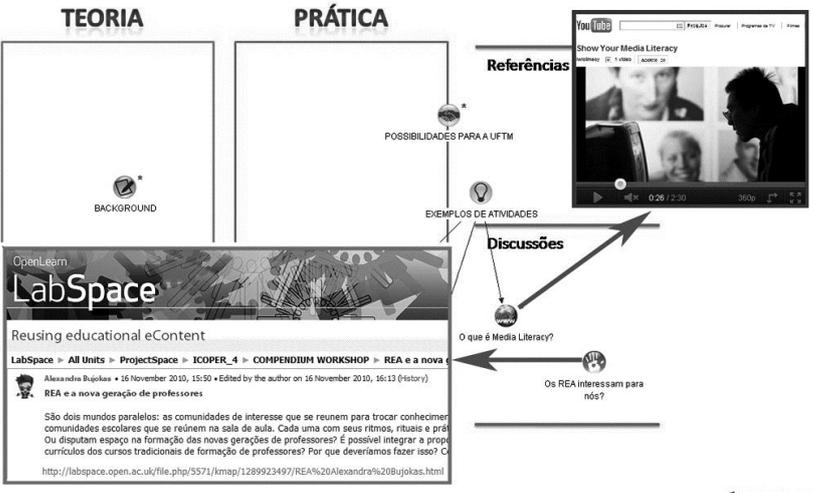
The ICOPER community http://www.icoper.org
This a Best Practice Network funded by the eContentplus programme of the European Commission. The 30-months-project started in September 2008 and has the mission to collect and further develop best practices for Higher Education tackling issues such as creating learning designs and teaching methods, authoring content for re-use, transferring knowledge in an outcome-oriented way and assessing it, as well as evaluating learning activities.

The OpenScout community http://www.openscout.net
This is also a project funded by the European Commission within the eContentplus Programme. It started in September 2009 and has a duration of three years. Its aim is to provide an education service in the Internet that enables users to easily find, access, use and exchange open content for management education and training. The core of the OpenScout service portfolio consists of a tool library, focusing on supporting users in adapting and sharing OER by employing social networking technologies.

In terms of applying the OER Flow, the following table 1 illustrates some of the steps that COLEARN's members applied to (re)create OERs. It also shows some examples created by Colearn's members to illustrate these steps.

Steps	Possible tools for Educators
Search: Find interesting sources and content. **Sample:** Select the bits that are really useful **Sequence:** Arrange the content by linking things in a coherent order	 OER map for the new generation of HE teachers created by the lecturer Alexandra Bujokas using Compendium, Papers from ICOPER project, Videos from Youtube and FM Webconference clips
Record: There are times when users really cannot find content to reuse. **Perform:** The act of teaching which can involve actual performance either face-to-face or online. **Share:** Sharing is not a separate act, it is all open	 OER repurposed map for the new generation of teachers readapted and recreated by the senior lecturer Stela Piconez and educational technologist Oscar L P Filho. They used OpenLearn LabSpace, Icoper New Media Space, Youtube videos and tools initially presented in the Tool-Library: Compendium, Youtube Clip Editor, and CC search engine.

The OER Flow – Open Educators as DJs. (Okada, Leslie 2010)

DISCUSSION

Reusable Learning Content (RLC) is defined as "*digital content designed to be reused, therefore, reproducible, addressable and flexible to be adapted multiple times in multiple ways, in multiple purposes, in multiple formats and in multiple contexts by multiple users. RLC can, therefore, include "content of learning", "learning objects", "teaching materials", "rich media content", "interactive components" and "open educational resources*" (Okada, 2011).

Examples of COLEARN community shows that OER Flow is an useful approach for designing Reusable Learning Content (RLC). The collaborative process of creating OER can be enriched by OER flow and RLC. (Connolly and Scott, 2009).

Reusability is an essential feature of online resources for users having the facility and flexibility for adopting and/or adapting them. In this context these terms can be defined as follows: adopting can mean selecting the material or part of the material as it is. Adopting involves finding, accessing and making a resource available to be used. Adapting includes small or significant changes in the content. Thus, the process of reusing learning content can be described in numerous forms (such as those listed below), which define, and therefore, clarify the many different ways in which learning content can be reused (Okada, 2010):

- **Assembling:** Integrating the content with other content in order to develop a module or new unit
- **Decomposing:** Separating content in different sections, break out content down into parts
- **Contextualizing:** Changing content or adding new information in order to assign meaning, make sense through examples and scenarios
- **Personalising:** Aggregating tools to match individual progress and performance
- **Re-authoring:** Transforming the content by adding your own interpretation, reflection, practice or knowledge
- **Redesigning:** Converting a content from one form to another, presenting pre-existing content into a different delivery format
- **Remixing:** Connecting the content with new media, interactive interfaces or different components
- **Repurposing:** Reusing for a different purpose or alter to make more suited for a different learning goals or outcome
- **Resequencing:** Changing the order or sequence
- **Summarising:** Reducing the content by selecting the essential ideas
- **Translating:** Restating Content From One Language Into Another Language
- **Versioning:** Implementing specific changes to update the resource or adapt it for different scenario.

OUTCOMES
Different kinds of OER maps created in Compendium were observed, and then analysed in four categories:
- Guided learning paths
- Integrating theory and practice
- Puzzle investigations
- Conceptual networks

Colearn's members shared a few comments that describe some benefits about using OER flow and OER tools for reusing and readapting content. They were able to:

- Search information about Open Learning
- Identify potential uses of OER
- Define key requirements for developing OER projects in the University

Colearn members who created OER maps also reflected on the process of using OER flow and the metaphor of acting as a DJ:
- Very satisfactory to have created a little piece of a unit that can be reused later in a bigger unit or course
- Not a difficult tool to learn how to use, but acknowledged that if you face any "technology blockages" Compendium might be a problem
- A very rich tool, with a lot of editing liberty, which they felt was a perfect characteristic for an "open tool" that is being used for education purposes
- Web-friendly, meaning that it should be easier to connect files and publish updated versions on the web

It is clear, however, that there is a need for further research related to best practices and effective strategies for supporting users in designing and disseminating such reusable OERs maps. The next stage of this work will be investigating requirements and strategies for supporting a social network designed specifically to accommodate the needs of various stakeholder clusters around OER maps. This future research will be focused on the OpenScout tool library that was envisioned as an ecosystem of people, stories, and resources. The purpose of this ecosystem is to bring together people that are developing or using learning resources and provide them with the ability to share their stories and resources. Four major stakeholder clusters will be involved: content developers, educators, collaborators, and social learners. Their stories include completed or running case studies and learning scenarios, their experiences with learning resources, as well as their future expectations from them. The learning resources involved are either learning tools or content, mainly OER.

By integrating more open flexible methods and tools with social networks we hope to find practical ways to address key issues in this area, specifically those around collaborative learning through OER maps. Our next questions, therefore, will be:
- How could a social network be used to support the design of RLC?
- How could learners and educators be engaged to share range of resources, tools and methods to support the design and evaluation of RLC?
- How could a social networking tool library be applied in users' educational context?

Acknowledgements

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