

## **Planning the OER landscape**

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### **Abstract**

The Open Educational Resources (OER) field will soon be entering its second decade and is thirsting for an analytic frame for the eco-system of content, tools, projects, institutions and enthusiasts. Community members are expressing concerns about redundancy and repetition in the field and the difficulty of tracking new developments and building on the work of others. We need to understand OER activity in a way that is descriptive of projects, goals and target audiences, and analytic with respect to educational efficacy and promising models. As the field advances, we need to create a common language, share a collective understanding of the gaps in the landscape and consider processes to improve connections and lessons learned.

In this paper we look at options to “map” OER as they travel from institutional ideas to community use to next generation learning. Such a map will be of limited value imposed from outside but instead we need to form the right seeds for a map to emerge as dynamic and capable of being owned. There are many options for presentation that can be considered such as roadmaps, process diagrams, cartoons and animations. Each representation has different merits for communication, and indeed a hybrid approach may be what is needed. A particular approach used in looking at data from more than 100 funded projects has been to use an online system, Cohere, for researchers to describe the characteristics of each project and to derive different views. These provide possible starting points for more general summaries of work on OER.

### **Keywords**

OLnet, OER, mapping, roadmap.

### **Motivation for mapping**

Open Educational Resources have an unusual characteristic in education; the connection from the designer to the user is not in their control. This means that there has grown up a very loose layer of collaboration around the projects and institutions involved in OER and in OCW. While groups can meet together and indeed make agreements for joint working these are the exceptions and explicitly not a requirement for use of the open resources. In a recent survey (Vollmer, 2010) found that there was a very high awareness of open resources in the US K-12 school system with 94% recognition of the term, and a moderate level of use of the resources (40%), and he noted that in many cases there was no formal link to the provider of the content. These positive results were balanced by some confusion in the distinction between online resources in general and open resources, and uncertainty about the funding and policy that applied for open resources. The survey findings, and the way in which open resources can spread, emphasizes the requirement for clear communication of the intentions and activity in the field of open resources.

Such concerns have also arisen in other fields, for example the Institute for Healthcare Improvement has developed an online Program Improvement Map (IHI, 2011). The Program Improvement Map is an analytic tool developed to share up-to-date knowledge about the science of performance improvement for healthcare. This allows various perspectives to be addressed, alternative actions summarized and advice and guidance tailored to particular situations.

## Mapping project activity

The mapping process can take different routes for example top-down expert driven views, bottom-up data driven visualizations, and community-driven shared creation. The OER and OCW community has examples of each of these. The OECD drew together a series of expert consultations and examined the main characteristics of OER projects in their report on “Giving knowledge for free” (Hylén, 2007) that included a simple two-dimensional summary of project activity (figure 1). A more open process was used in the online UNESCO IIEP forums to use discussion supported by expert summaries to consider a range of issues D’Antoni & Savage (2009). Figure 2 illustrates the assigned priorities across a range of issues identified by the group.

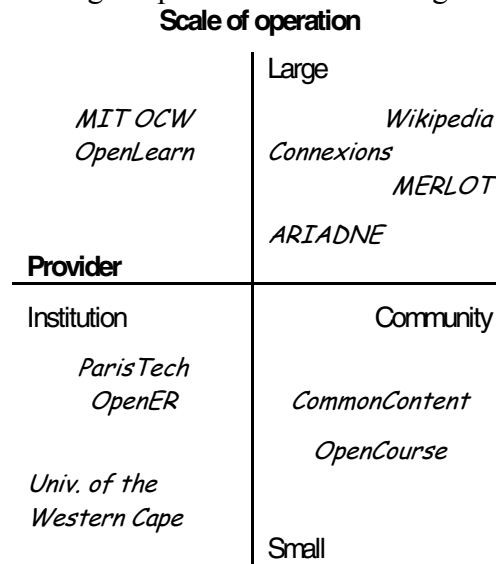


Figure 1 Categories of Open Educational Resource providers (reproduced from OECD, 2007)

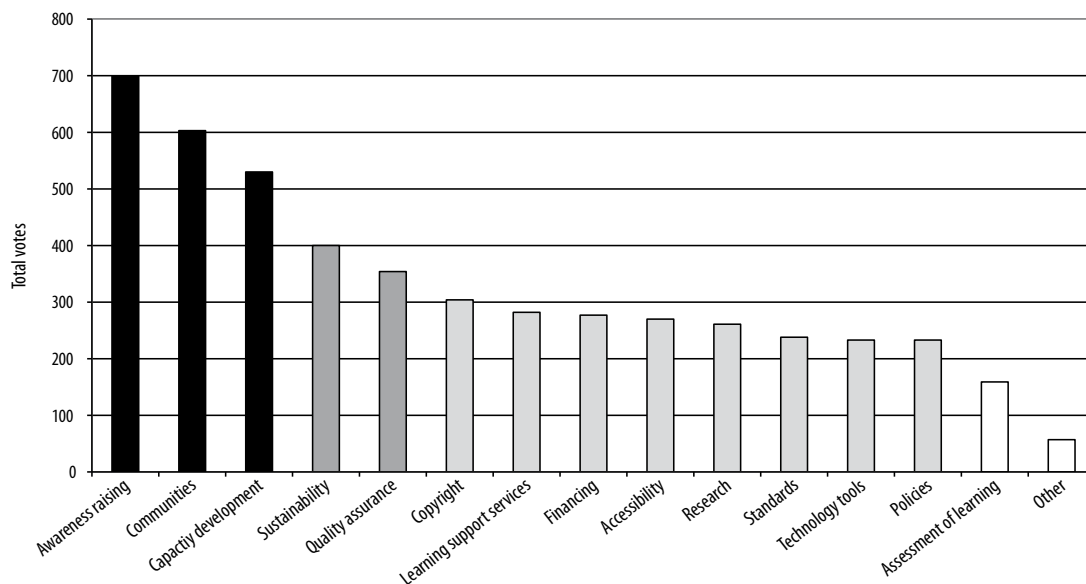


Figure 2: Priority issues in rank order (reproduced from D’Antoni, 2009)

These visualizations and the aspects of the projects and issues they illustrate represent only two of many possibilities.

## Understanding project information

The William and Flora Hewlett Foundation has provided funding for OER projects across much of the last decade and so are interested in how those projects view themselves and the work they have carried out. At the request of the foundation an analysis was made of data from the reporting of more than 100 OER project funded between 2002 and 2010. A team of four researchers worked through the reports and drew out themes and issues and identified links and open questions that were raised by the reports. As part of this analysis a software tool called Cohere (De Liddo and Shum, 2010) was used to collate all the data and filter it in various forms.

Using Cohere offers three distinct advantages.

- First that the members of the research teams could see and work with the data so that the tool supported thinking through the data.
- Second, that the data could be worked on collectively both within the original team and potentially beyond it.
- Third that views of the data could be altered to construct dynamic connections and new interpretations.

Views supported by Cohere include timelines, thematic and social. Figure 3 for example shows the audience connections for one of the organizations within the data. The candidate maps produced in this way can then be used either directly or as final artifacts to prompt a collective intelligence approach to refining and discussing the options.

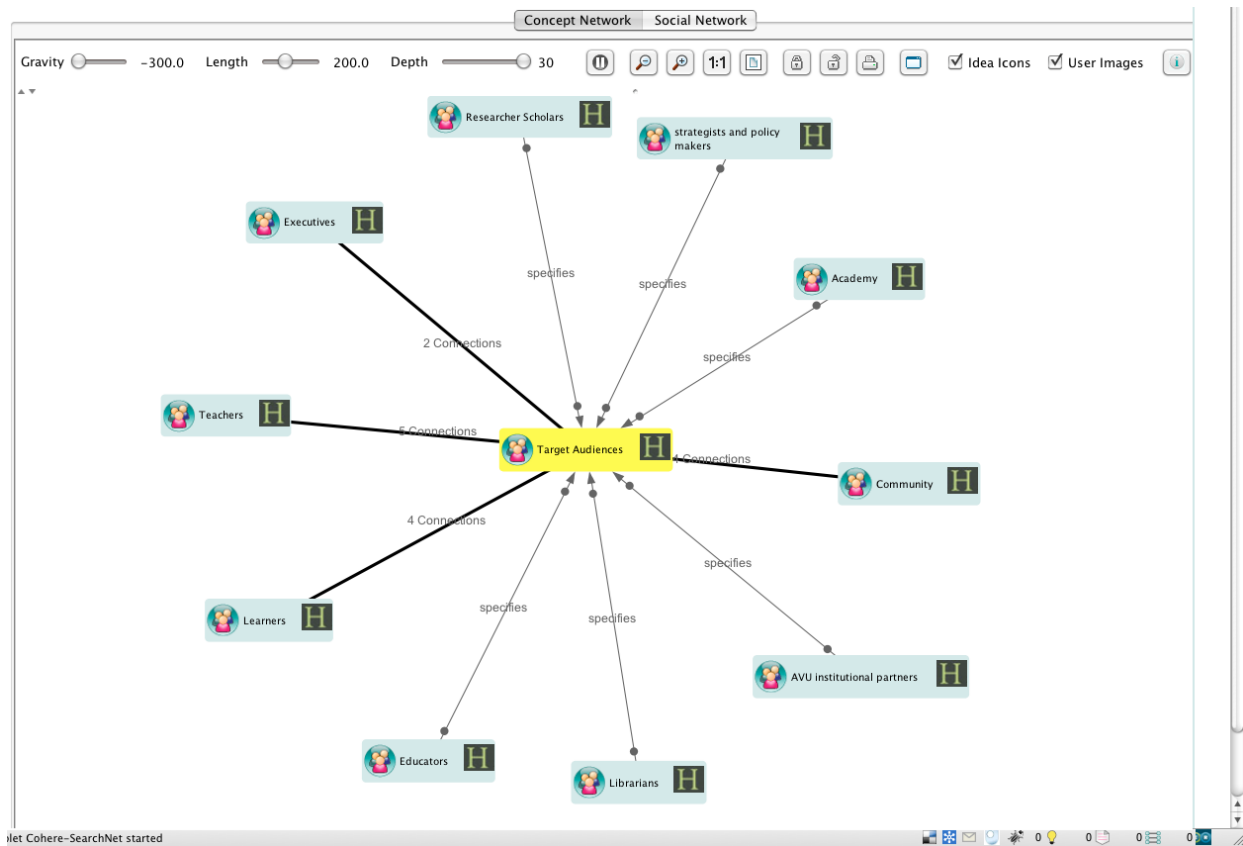


Figure 3: Example view from the Cohere system

## Conclusion

In creating maps care is needed to ensure that we do not end up only considering the evolutionary and incremental when education needs the revolutionary and fundamental. We also see tools such as Cohere as a means to an end: to help reason with information and review options in order to help communication and understanding. Our current view is that a hybrid approach will be needed to get the best out of a review of the OER landscape rather than relying on all using visualization tools with their complexities. Mapping the domain of OER in multiple ways helps record key events, identify what we have missed, and sketch out steps into the future; adding in the collective and community supports alternative ideas and gives space for the change needed to cope with the challenges for education.

The role of OCW has been key in developing both the profile of OER and engagement from the educational world with the production of OER. Placing the OCW Community into the mapping process will allow those contributions to become more apparent and help meet the next generation learning challenge. As we complete the initial phase of the mapping we hope to extend the invitation to take part in further refinement and extension and improve the connections between activities in this important area.

## References

- D'Antoni (2009). Section 4: Priorities for action. In *Open Educational Resources: Conversations in Cyberspace*. Eds Susan D'Antoni & Catriona Savage. UNESCO Publishing.  
[http://oerwiki.iiep.unesco.org/index.php/Open\\_Educational\\_Resources:\\_Conversations\\_in\\_Cyberspace](http://oerwiki.iiep.unesco.org/index.php/Open_Educational_Resources:_Conversations_in_Cyberspace) accessed March 7, 2011
- De Liddo, A., & Shum, S. B. (2010). Cohere: A prototype for contested collective intelligence. In *ACM Computer Supported Cooperative Work (CSCW 2010) - Workshop: Collective Intelligence In Organizations - Toward a Research Agenda*. <http://oro.open.ac.uk/19554/> accessed March 7, 2011
- Hylén, J. (2007) *Giving knowledge for free*. OECD.  
<http://www.oecd.org/dataoecd/35/7/38654317.pdf> accessed March 7, 2011.
- Vollmer, T. (2010). iNACOL survey: An inquiry into OER projects, practices, and policy in U.S. K-12 schools. In *Open Ed 2010: The Seventh Annual Open Education Conference*, 2-4 November 2010, Barcelona, Spain
- IHI (2011). Program Improvement Map. <http://www.ihl.org/IHI/Programs/ImprovementMap/> accessed March 7, 2011

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