

Open Educational Resources: Building a Culture of Sharing

Susan D'Antoni
OER conference
Warsaw, 23 April 2009

To remain human and liveable, knowledge societies will have to be societies of shared knowledge.”¹ – Koïchiro Matsuura, Director-General of UNESCO.

1. Open Educational Resources

Today our societies face significant challenges. Globalization and the rise of knowledge-intensive societies call for an increasingly skilled population. Education is central to national social and economic development and never more so than at this time. The Director-General of UNESCO recently reminded the leaders of the G-20 countries that “Spending on education is indeed one of the most effective investments a country can make”.²

The challenge to education systems is to extend the reach of education, while improving its quality and flexibility. Over the years, many have looked to information and communication technologies to offer solutions. Some new technologies have shown promise for education, but many have disappointed in the end. One reason for such disappointment may be that in focusing attention on the technology itself, we have paid less attention to the educational content to be delivered.

Today, however, there is an important convergence:

- increasing connectivity to the Internet,
- growing numbers of low-cost computers and enhanced mobile phones,
- an expanding body of content in digital format.

This convergence not only offers the promise of increasing access to knowledge; it facilitates the *sharing* of that knowledge. Content in digital format is easy to adapt, to build upon, to share – provided that it is in the public domain, or has been released under an intellectual property license that permits free use and adaptation by others.

This is the concept that underlies Open Educational Resources (OER). The term refers to digitized educational materials offered freely and openly for use and re-use in teaching, learning and research. Such resources may be modules, full courses, textbooks, tests, audio, video, software and other tools used to support access to knowledge.

And promoting the creation and use of OER will contribute to building a culture of sharing. “At the heart of the movement towards Open Educational Resources is the simple and powerful idea that the world’s knowledge is a public good.”³

2. The growing OER movement: evidence of a culture of sharing

MIT OpenCourseWare

In 1999, the faculty members of the Massachusetts Institute of Technology (MIT) considered how to use the Internet in pursuit of its mission – to advance knowledge and educate students.

In 2000 MIT initiated the OpenCourseWare project with the objective of making accessible virtually all primary course material on the web – reading lists, lecture notes, exams and videos :

“We now have powerful opportunity to use the Internet to enhance this process of conceiving, shaping, and organizing knowledge for use in teaching. In so doing, we can raise the quality of education everywhere.”⁴

“Open Educational Resources”

By 2002, the first 50 courses had been published. At this point, UNESCO with support from the William and Flora Hewlett Foundation convened a group of academics to assess the potential of MIT’s new initiative for developing countries. The response was positive. The participants formally expressed “their wish to develop together a universal resource for the whole of humanity, to be referred to henceforth as Open Educational Resources ... they hope that this open resource for the future mobilizes the whole of the worldwide community of educators”.⁵

Growth in institutional OER initiatives

Since 2002, the MIT OpenCourseWare project has progressed – there are now almost 1,900 courses on the web. And MIT has been joined by other institutions around the world in the OpenCourseWare Consortium. The consortium is a collaboration of more than 200 institutions that follow the same model – that of the free and open digital publication of high quality educational material organized as courses. By mid 2008 the Consortium had made 6,200 courses available on the web.

Many successful models have emerged, such as the notable Connexions project of Rice University that we are going to hear about. And there are now numerous OER initiatives around the world, in what is becoming a new movement in education. Some initiatives address institutional objectives, but some are aimed at national objectives.

An institutional initiative aligned to a national objective

Reflecting the Lisbon agenda aim to increase the competitiveness of Europe’s economy, the government of the Netherlands has set the national goal of increasing participation in higher education. It aims to increase participation from 30% to 50% of the population by 2010.

The direct response of the Open University of the Netherlands was to launch its OpenER project in 2006. The objective of OpenER is to “bridge the gap between informal and formal learning and to establish a new style of entry portal to higher education with no barriers at all”.⁶

Learners have access to content at no cost – they study on their own schedule. The learner decides if and when to seek formal assessment and accreditation. This model provides truly open and flexible e-learning.

The experiment has had several important outcomes. Significantly, it resulted in a growing awareness of the value of OER for Dutch education. In 2008, the Minister of Education launched a plan, Wikiwijs, to create a national infrastructure for the creation and use of OER by teachers at all levels of the education system.

3. UNESCO action: promoting awareness of OER

The need for awareness raising

It is clear that Open Educational Resources can contribute to the building of knowledge societies. However, if there is little or no awareness of the concept of OER or of the significant OER movement, that potential will not be realised.

As the UN agency responsible for education, UNESCO has taken up the challenge of informing Member States of the OER movement and its potential to contribute to improving access to knowledge. Supported by the Hewlett Foundation, UNESCO has worked since 2005 to increase awareness of Open Educational Resources, and to support capacity building and informed decision-making.

The international OER Community

To begin the process of awareness raising, UNESCO issued an open invitation to join an international discussion of OER in a series of online seminars. Almost 500 persons from 90 countries joined the first discussion in late 2005 for six weeks of very active interaction. Over time, the number of members grew and the OER Community, as it became known, continued to interact in regular topic-specific discussions.

By mid 2007, the Community had almost 650 members from 98 countries. Members represented a range of organisations, with over half coming from universities and distance learning institutions. Almost 40% held

senior positions – either as head or senior official or manager – within their institutions, and 30% were teachers or researchers.

What are the priorities to advance OER?

After almost two years of discussion and reflection, members of the OER Community were asked to give their opinion on how best to advance the OER movement – and who should take action. More than half of the community members took the time to review a list of 14 potential priorities, and to rank order the five most important.

Five priorities stood out clearly – but the sixth warrants attention.

- ***Awareness raising and promotion*** and ***communities and networking*** were identified as the two main priorities to advance the movement.
- ***Capacity development***, ranked third, is central to supporting and increasing the development and use of OER.
- The fourth issue, ***sustainability*** underlines the need to ensure that OER initiatives become embedded in policies, structures and programmes to extend learning opportunities and knowledge sharing.
- The identification of ***quality assurance*** as the fifth priority speaks to the concern that with open access to all, the traditional structures that support and protect the learner may be absent.
- The sixth issue, ***copyright***, is central to making resources freely and openly available for re-use. Resources intended for release as OER with an open licence must be free of copyrighted material unless appropriate clearance has been obtained.

The report of this priority setting exercise⁷ has been translated by a number of Community members themselves. It is available in 12 languages – including Polish,⁸ with thanks to the Polish member of the UNESCO OER Community, Jaroslaw Lipszyc.

Who should take action?

Four lead stakeholders were identified for taking action:

- ***academics*** for research, learning support and assessment and quality assurance;
- ***higher education institutions*** for awareness raising and capacity development – and the functions that relate to their mission – research and supporting learning;
- ***international organisations*** for awareness raising, copyright, financing and standards;
- ***national governments*** for financing, ensuring accessibility, copyright and policy development.

4. Strengthening a culture of sharing at the national level

National governments have an important role in supporting the OER movement.

The need for stimulus funding

Funding for the first OER projects came mostly from foundations – chiefly the Hewlett Foundation. However, if the OER movement is to flourish, new funding models are needed.

The OER Community identified national governments as having an important role to play in financing OER. Within Europe this is already beginning to happen. We have seen the example of OpenER that was financed in part by the Dutch Ministry of Education, Culture and Science, and the Ministry of Social Affairs. Another example is that of the UK Joint Information Systems Committee (JISC) and the Higher Education Academy, which have just put out a funding call for pilot OER programmes. A total of £4.7 million is available for UK institutions, subject area consortia and individual staff “to release existing learning resources under a suitable license for open use and repurposing”.⁹

There is a strong argument in favour of public support for OER. If public money is to be invested in the development of educational materials, the materials should be available to all.

The importance of accessibility

Making OER accessible to all has implications for infrastructure and technology. National investment may be required to ensure equitable access on the part of all citizens.

In 2007, Poland was ranked sixth in the EU for both Internet and cell phone use – and first of the new EU accession states. Poland had 16 million Internet users and over 41 million cell phones in circulation. I began by arguing that the time may have come for new technologies to deliver on their promise of increased access to knowledge thanks to a “convergence” of increased Internet access, available devices and open digital content. In Poland the technologies for sharing knowledge are developing fast. It is time to focus attention on making digital content openly and freely available.

Educators and educational institutions, as well as museums, may be seen as having the major role in making resources accessible. But public archives also play an important role in ensuring not only access, but preservation. Their challenge will be to respond to the increasing demand for both storage and access.

Collaboration between national institutions and platforms for open sharing will improve access by enabling materials to reach new audiences – who will be able to use materials in new ways.

The need for enabling policy

If there is to be a significant move towards open sharing of educational resources at the national scale, it must be enabled by an appropriate policy environment.

National government policy can ensure that the output of work undertaken with government support is made available to all through an open license. The degree of openness of the license can even serve as a criterion for awarding grants and contracts.

Enabling policy could be the cornerstone on which to build a national culture of sharing.

5. The need for champions

The UNESCO OER Community identified an additional stakeholder role – that of championing OER.

Every movement, if it is to succeed, must have its champions.

Here in Poland, you have reason to be proud – this role has been taken up with energy by the Modern Poland Foundation and the newly formed Open Education Coalition.

¹ UNESCO. 2005. *Towards Knowledge Societies*. UNESCO World Report. Paris, UNESCO.

² UNESCOPRESS. 2009. UNESCO Director-General to G-20: “Invest in education”. Press Release N°2009-28. Available online at http://portal.unesco.org/en/ev.php-URL_ID=44967&URL_DO=DO_TOPIC&URL_SECTION=201.html.

³ Smith, M. S. & Casserly, C. M. 2006. The promise of open educational resources. *Change*, 38(5), 8-17.

⁴ Vest, C. M. 2005. *Disturbing the Educational Universe: Universities in the Digital Age – Dinosaurs or Prometheans?* Report of the President For the Academic Year 2000-01. Available online at <http://web.mit.edu/president/communications/rpt00-01.html>.

⁵ UNESCO. 2002. *Forum on the Impact of Open Courseware for Higher Education in Developing Countries: final report*. Available online at <http://www.wcet.info/resources/publications/unescofinalreport.pdf>.

⁶ Schuwer, R. and Mulder, F. 2009. OpenER, a Dutch initiative in Open Educational Resources. *Open Learning: The Journal of Open and Distance Learning*, Vol. 24, No. 1, pp. 67-76. Available online at <http://www.informaworld.com/smp/content~content=a909093008~db=all~order=page>.

⁷ D’Antoni, S. 2008. *Open Educational Resources: The Way Forward. Deliberations of an international community of interest*. Paris, UNESCO-IIEP. Available online at <http://oerwiki.iiep-unesco.org/index.php?title=OER: the Way Forward>.

⁸ The Polish translation is available online at <http://oerwiki.iiep-unesco.org/index.php?title=OER: the Way Forward/Collaborative work on translations/Polish Version>.

⁹ HEFCE/Academy/JISC Grant Funding 14/08. Open Educational Resources Programme: Call for Projects. 19 December 2008. Available at http://www.jisc.ac.uk/fundingopportunities/funding_calls/2008/12/grant1408.aspx.