The Benefits of Open

**Open Scotland Background Briefing Paper**

This background paper presents executive summaries and links to key documents and publications relating to all aspects of openness in education.

Open Scotland is a one day summit facilitated by Jisc Cetis in collaboration with SQA, Jisc RSC Scotland and the ALT Scotland SIG.  The event will provide an opportunity for key stakeholders to critically reflect on the national and global impact and opportunities of open education, provide a forum to identify shared strategic interests and work towards a more integrated Scottish approach to openness in education.

Lorna M. Campbell

June 2013

Cetis, <http://jisc.cetis.ac.uk/>



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# Open Educational Resources

## Paris OER Declaration

**Author(s):** UNESCO

**Date:** June 2012

**URL:** <http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/Events/Paris%20OER%20Declaration_01.pdf>

The Paris OER Declaration, adopted during the World Open Educational Resources (OER) Congress held in June 2012 at UNESCO Headquarters, was the first step towards the development of policies to support OER. The Declaration aims to encourage governments to contribute to the awareness and the use of OER and to develop strategies and policies to integrate OER in education. The Paris Declaration outlines ten key points:

a. Foster awareness and use of OER.

b. Facilitate enabling environments for use of Information and Communications Technologies (ICT).

c. Reinforce the development of strategies and policies on OER.

d. Promote the understanding and use of open licensing frameworks.

e. Support capacity building for the sustainable development of quality learning materials.

f. Foster strategic alliances for OER.

g. Encourage the development and adaptation of OER in a variety of languages and cultural contexts.

h. Encourage research on OER.

i. Facilitate finding, retrieving and sharing of OER.

j. Encourage the open licensing of educational materials produced with public funds.

## Towards a Global Policy for Open Educational Resources: The Paris OER Declaration and its Implications

**Author(s):** J.M. Pawlowski and T. Hoel

**Date:** 2012, Version 0.2

**URL:** <http://monet.informatik.rwth-aachen.de/giotto/OpenScout_df6f1252-bfa6-11e1-a668-e13baff9bd23.pdf>

This paper highlights how the Declaration shows the importance of Open Educational Resources and provides recommendations to governments and institutions around the globe. It provides a brief introduction to OER and reflects on the main recommendations and proposed implementation actions for governments as well as institutions. The paper is a living document that will record progress and comments from stakeholders. It also hopes to contribute potential solutions to the following:

* Supporting the implementation of the Paris OER Declaration.
* Enabling and supporting collaborative actions.
* Analysing opportunities and barriers for successful implementation of the Paris Declaration in order to provide guidance for policy makers in governments, institutions and organisations.
* Developing action alternatives as a basis for policy building and policy implementation.

## Survey on Governments’ Open Educational Resources (OER) Policies

**Author(s):** S. Hoosen, for COL and UNESCO

**Date:** June 2012

**URL:** <http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/themes/Survey_On_Government_OER_Policies.pdf>

The Commonwealth of Learning (COL) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) have taken an active interest in the development of the open educational resources (OER) movement. As part of their joint project Fostering Governmental Support for Open Educational Resources Internationally, UNESCO and COL invited governments to provide information about their policies in relation to OER. This report provides an overview of the findings of the COL/UNESCO survey on OER policies and activity across all countries of the world.

## Guidelines for Open Educational Resources (OER) in Higher Education

**Author(s):** UNESCO

**Date:** 2012

**URL:**

<http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/guidelines-for-open-educational-resources-oer-in-higher-education/>

Open educational resources (OER) are materials used to support education that may be freely accessed, reused, modified, and shared. These Guidelines outline key issues and make suggestions for integrating OER into higher education. Their purpose is to encourage decision makers in governments and institutions to invest in the systematic production, adaptation and use of OER and to bring them into the mainstream of higher education in order to improve the quality of curricula and teaching and to reduce costs. Given the potential of OER to improve higher education systems, UNESCO and the Commonwealth of Learning (COL) have developed these Guidelines, after broad consultations with stakeholders in all regions of the world, to support governments, higher education institutions/providers, academic staff, student bodies and quality assurance/accreditation and recognition bodies.

## A Basic Guide to Open Educational Resources (OER)

**Author(s):** A. Kanwar, S. Uvalić-Trumbić and N. Butcher for COL and UNESCO

**Date:** July 2011

**URL:** <http://www.col.org/resources/publications/Pages/detail.aspx?PID=357>

This Guide comprises three sections. The first – a summary of the key issues – is presented in the form of a set of ‘Frequently Asked Questions’. Its purpose is to provide readers with a quick and user-friendly introduction to Open Educational Resources (OER) and some of the key issues to think about when exploring how to use OER most effectively.  The second section is a more comprehensive analysis of these issues, presented in the form of a traditional research paper. For those who have a deeper interest in OER, this section will assist with making the case for OER more substantively. The third section is a set of appendices, containing more detailed information about specific areas of relevance to OER. These are aimed at people who are looking for substantive information regarding a specific area of interest.

## UKOER Phase 3 Synthesis and Evaluation Report: Impacts and Benefits

**Author(s):** L. McGill, L., I. Falconer, A. Littlejohn, and H. Beetham for Jisc

**Date:** February 2013

**URL:** <https://oersynth.pbworks.com/w/page/59767109/phase3ImpactAndBenefits>

This report covers the impacts and benefits of the third phase of the JISC / HEA UK Open Educational Resources programme and includes a table of benefits for learners, OER creators, other staff and users, educational institutions, and other sectors, including indirect benefits such as partnership building.

## An open and closed case for educational resources

**Author(s):** P. Barker, Cetis

**Date:** September 2010

**URL:** <http://blogs.cetis.ac.uk/philb/2010/09/10/open-closed-case/>

A short presentation from the 2010 Repository Fringe Conference. Open Educational Resource (OER) or OpenCourseWare (OCW) release can be a good way of overcoming some of the problems institutions have regarding the management of their learning materials.

## A Guide to Open Educational Resources

**Author(s):** C. Groom for Jisc

**Date:** September 2010

**URL:** [http://www.jisc.ac.uk/publications/programmerelated/2013/Openeducationalresources.aspx](http://www.jisc.ac.uk/publications/programmerelated/2013/Openeducationalresources.aspx#Benefits)

A general guide to open educational resources covering:

* What are open educational resources?,
* Open educational resources – the story so far,
* Finding and sharing open educational resources,
* Open licensing,
* Approaches to releasing, using, reusing and repurposing open educational resources,
* The rationale for adopting open educational resources.

This paper also includes case studies on the benefits of OER for teachers, learners, institutions, and communities.

## Towards a Nordic Alliance for Open Education - a Position Paper

**Author(s):** J. Pawlowski, T. Hoel et al

**Date:** 2010 - 2012

**URL:** <http://nordicoer.org/wp-content/uploads/2013/02/Nordic_Open_Education_Alliance_PositionPaper_ver1.0.pdf>

Open Educational Resources are discussed widely on a global, European and even Nordic level. UNESCO coined the term Open Educational Resources (OER) some 10 years ago and published in June 2012 a global agenda for OER, the Paris Declaration (adopted by OER World Congress). The Declaration shows the importance of Open Educational Resources and gives recommendations to governments and institutions around the globe. The European Union has started a large-scale initiative on “Opening Up Education”. Both the Nordic Council and the Nordic University Co-operation (NUS) will discuss OER in 2013.

These developments inspired a Nordic initiative on promoting and utilizing Open Education in the Nordic countries with a focus on creating a strong base for OER and Open Educational Practices (OEP) in the region, also with a global outreach in mind. The Nordic countries have the potential to become a forerunner in OEP and the use of OER activities in Europe:

1. The Nordic countries share many values related to education and technology development; the political and governmental institutions are quite similar and there is a tradition for exchange of knowledge and solutions between the countries. Focusing on a relatively homogeneous region allows the newly-formed group to come up with specific recommendations that can reach the ears of policy makers, be implemented in policies and practice, and be used in new project proposals.
2. Open Educational Resources could potentially be a change agent in schools as well as in universities and vocational education. Having OER as scope allows the group to use one strong prism to reflect the crossroads the educational systems have to navigate in the target countries.

This document provides a brief introduction to OER and reflects on the main recommendations as well as proposing implementation actions for governments and institutions.

## OCW Benefits

**Author(s):** Various authors, for MIT

**Date:** February 2013

**URL:**

<http://www.nordlet.org/sites/default/files/Nordic_Open_Education_Alliance_PositionPaper_ver1.0.pdf>

Five papers relating to the MIT Open Courseware initiative focusing on student recruitment, international development, education, social inclusion, and academic careers.

* A world of OCW benefits: Powering career advancement by M. Brown
* A decade of OCW benefits: Bringing knowledge to the street by S. H. Wright
* A decade of OCW benefits: Building a better course through OCW by S. Carson
* A decade of OCW benefits: Resources for real world solutions by S. Carson
* A decade of OCW benefits: Drawing talent to MIT by S. Carson

## Open Educational Resources: Opening Access to Knowledge

**Author(s):** R. McGreal (Ed.) for *The International Review of Research in Open and Distance Learning*

**Date:** 2013

**URL:** <http://www.irrodl.org/index.php/irrodl/issue/view/56>

A special issue of the peer reviewed journal *The International Review of Research in Open and Distance Learning*.  Papers include:

* Moving to open educational resources at Athabasca University: A case study by C. Ives and M. M. Pringle
* Open education resources and mobile technology to narrow the learning divide by M. Ally and M. Samaka
* Mobile authoring of open educational resources as reusable learning objects by Dr Kinshuk and R. Jesse
* Strategies for sustainable business models for open educational resources by F.H.T de Langen
* Government support for open educational resources: Policy, funding, and strategies by P. Stacey
* Open access scholarly publications as OER by T. Anderson
* The logic of national policies and strategies for open educational resources by F. Mulder
* Exploration of open educational resources in non-English speaking communities by C. Cobo
* Visualization mapping approaches for developing and understanding OER by T. Connolly

## Trend Report: Open Educational Resources

**Author(s):** R. Jacobi and N. van der Woert (Ed.) for the SURF Special Interest Group Open Educational Resources

**Date:** 2012

**URL:** <https://www.surfspace.nl/media/bijlagen/artikel-697-ee18ac0f1441bb158e6122818f5f589e.pdf>

A growing number of higher education institutions worldwide are making their courses and other educational resources openly available to students, instructors, and other interested parties via websites and online repositories; as a result, an increasing number of people have access to high-quality educational resources. Governments are also making major investments in developing Open Educational Resources. This trend is part of a worldwide “Open Movement”.

Open Educational Resources (OER) belong to a digital “openness family”, which also includes Open Source and Open Access. This report describes the trends in the Netherlands and elsewhere in the field of Open Educational Resources. It comprises twelve articles by Dutch experts in the field of OER in higher education. It also contains twelve “Intermezzos” giving interesting examples.

The report is published by the Special Interest Group Open Educational Resources (SIG OER), a partnership made up of representatives of the Dutch higher education sector and SURF. The SIG OER promotes and facilitates the creation of communities, knowledge generation and sharing, collaboration, and strategic planning regarding Open Educational Resources in higher education in the Netherlands. The SIG is made up of experts and other interested parties in the sector who collaborate to increase the understanding and use of Open Educational Resources.

We do this by

* Generating knowledge: identifying and tracking new trends and developments in the Netherlands and elsewhere;
* Pooling knowledge: bringing experts and other interested parties together;
* Sharing knowledge: sharing information, articles, news reports, and best practices in the area of OER

# Massive Open Online Courses (MOOCs)

## MOOCs and Open Education: Implications for Higher Education

**Author(s):** L. Yuan and S. Powell, Cetis

**Date:** March 2013

**URL:** <http://publications.cetis.ac.uk/2013/667>

This report sets out to help decision makers in higher education institutions gain a better understanding of the phenomenon of Massive Online Open Courses (MOOCs) and trends towards greater openness in higher education and to think about the implications for their institutions. The phenomena of MOOCs are described, placing them in the wider context of open education, online learning and the changes that are currently taking place in higher education at a time of globalisation of education and constrained budgets. The report is written from a UK higher education perspective, but is largely informed by the developments in MOOCs from the USA and Canada. A literature review was undertaken focussing on the extensive reporting of MOOCs through blogs, press releases as well as openly available reports. This identified current debates about new course provision, the impact of changes in funding and the implications for greater openness in higher education. The theory of disruptive innovation is used to help form the questions of policy and strategy that higher education institutions need to address.

## MOOCs @ Edinburgh 2013

**Author(s):** MOOCs@Edinburgh Group

**Date:** May 2013

**URL:** <http://www.era.lib.ed.ac.uk/handle/1842/6683>

A report summarising the experience of the University of Edinburgh in offering six new massive open online courses (MOOCs) in partnership with Coursera.

## The Year of the MOOC

**Author(s):** Audrey Waters

**Date:** December 2012

**URL:** <http://hackeducation.com/2012/12/03/top-ed-tech-trends-of-2012-moocs/>

In retrospect, it’s not surprising that 2012 was dominated by MOOCs as the trend started to really pick up in late 2011 with the huge enrolment in the three computer science courses that Stanford offered for free online during the Fall semester, along with the announcement of [MITx](http://web.mit.edu/newsoffice/2011/mitx-education-initiative-1219.html) in December. Add to that the increasing costs of college tuition and arguments that there’s a “higher education bubble,” and the promise of a free online university education obviously hit a nerve.

This blog post by Audrey Waters provides a critical overview and timeline of the development of MOOCs

## MOOCs and OER

**Author(s):** Lorna M. Campbell, Cetis

**Date:** May and June 2013

**URL:** <http://blogs.cetis.ac.uk/lmc/tag/moocs/>

Two blog posts exploring the controversial relationship between open educational resources and massive open online courses. These posts focus on the openness, or otherwise, of Coursera hosted courses, and the restrictions placed on the reuse of educational content by the terms and conditions of the UK FutureLearn MOOC consortium.

# Open Source

## Open Source Procurement Toolkit

**Author(s):** Cabinet Office

**Date:** November 2011

**URL:** <https://www.gov.uk/government/publications/open-source-procurement-toolkit>

The Government first set out its policy on the use of open source in 2004. This was restated in both 2009 and 2010. The Government ICT Strategy states that “Where appropriate, Government will procure open source solutions.”

To support this, Action 3 of the Strategy says that “To create a level playing field for the use of innovative ICT solutions, the Government will publish a toolkit for procurers on best practice for evaluating the use of open source solutions.”

The following set of documents make up that toolkit:

* All About Open Source – including FAQs
* ICT Advice Note - Procurement of Open Source
* Procurement Policy Note on Open Source
* OSS Options
* CESG Guidance on Open Source - for Government users only
* Publically accessible summary of the security guidance
* Total Cost of Ownership
* Total cost of ownership of open source software: a report for the UK Cabinet Office supported by OpenForum Europe
* OSS SI Assessment Criteria

The purpose of this toolkit is to ensure that there is a level playing field for open source and proprietary software and that some of the myths associated with open source are dispelled.

## Open source in higher education: how far have we come?

**Author(s):** Scott Wilson, OSSWatch for *The Guardian*

**Date:** March 2013

**URL:** <http://www.guardian.co.uk/higher-education-network/blog/2013/mar/28/open-source-universities-development-jisc>

Universities are ahead of the curve in adopting open source, they should now lead the public sector in exploring its full potential.

Open source is an approach to coding and creating software. It's free to use and, as the name suggests, denotes a code that is open to be used, adapted and distributed by anyone. You can examine it and learn from it, change the purpose of it and even share it. This approach can offer huge cost savings, but it's the ability to play with the software which offers the greatest benefits. Open source not only promotes creativity but helps make technology more democratic allowing a community to work together to solve common problems.

## Free / Libre / Open Source Software: Scottish Policy Statement

**Author(s):** Open Source Software Working Group

**Date:** 2007

**URL:** http://www.scotland.gov.uk/Resource/Doc/1067/0049471.pdf

This report was produced by the Open Source Software Working Group, which was set up by the Scottish Executive to examine the role that FLOSS could play in the Scottish public sector. It explores the Scottish implications of the Office of Government Commerce (OGC) report on Open Source Software Trials in Government and sets out a policy position for the Scottish public sector.

# Open Data

## Open Data White Paper - Unleashing the potential

**Author(s):** HM Government

**Date:** June 2012

**URL:** <http://data.gov.uk/sites/default/files/Open_data_White_Paper.pdf>

This paper seeks to lay out what citizens, businesses and the public sector can expect from government to help unlock the benefits of Open Data. The paper covers:

* Building a transparent society
* Enhancing access
* Building trust
* Makin smarter use of data
* The future – a truly transparent society
* Making open data real: consultation checklist

## Shakespeare Review of Public Sector Information

**Author(s):** HM Government

**Date:** June 2012

**URL:** <https://www.gov.uk/government/publications/shakespeare-review-of-public-sector-information>

In October 2012, BIS and Cabinet Office ministers announced that Stephan Shakespeare, the Chair of the Data Strategy Board, would lead an independent review of Public Sector Information (PSI). The review was a commitment contained in the government’s [Open Data White Paper: Unleashing the Potential](https://www.gov.uk/government/publications/open-data-white-paper-unleashing-the-potential), published by the Cabinet Office in June 2012.

Public sector information covers the wide range of information that public sector bodies collect, produce, reproduce and disseminate in their many areas of activity while accomplishing their public tasks.

The review explores the growth opportunities of, and how to widen access to, the wealth of information held by the public sector. It makes nine recommendations to government.

## Open Data Dialogue Final Report

**Author(s):** Research Councils UK

**Date:** June 2012

**URL:** <http://www.rcuk.ac.uk/documents/documents/TNSBMRBRCUKOpendatareport.pdf>

Undertaken on the behalf of the Research Councils UK in partnership with JISC, the Royal Society and Sciencewise-ERC1, this public dialogue explored views on open data, data reuse and data management policies within research.

The public dialogue was designed to:

* Provide insight on the business issues that the dialogue will support, at the research councils and JISC.
* Build on prior work in the area and account for the wider policy framework.
* Engage people meaningfully around this complex area, enabling the public to frame issues and test out any principles emerging across a range of research contexts.

The research comprised a number of elements:

* An initial literature and policy review of the area.
* Two reconvened discussion groups in Swindon and Oldham.
* A workshop involving key stakeholders conducted between the first and second wave of the public dialogues.

A total of forty public participants were recruited, demographically reflecting the gender, socio-economic group, age group and ethnicity profiles of their local area.

## White House Open Data Policy Initiative

**Author(s):** Office of the Press Secretary, The White House

**Date:** May 2013

**URL:** <http://www.whitehouse.gov/the-press-office/2013/05/09/obama-administration-releases-historic-open-data-rules-enhance-governmen>

Press release with links to President Obama’s Executive Order and the Open Data Policy statement relating to data.gov.

# Open Access

## Benefits to the Private Sector of Open Access to Higher Education and Scholarly Research report

**Author(s):** P. Parsons, D. Willis and J. Holland,forJISC

**Date:** October 2011

**URL:** <http://open-access.org.uk/wp-content/uploads/2011/10/OAIG_Benefits_OA_PrivateSector.pdf>

Knowledge transfer from the higher education (HE) and further education (FE) sectors has been a long-standing issue for public policy. With increasing technological possibilities, there is interest in how ‘Open Access’ publication may provide greater potential to stimulate impacts from HE research and scholarly study and in particular for innovation and upstream technology transfer. Wider European research has already shown some utility and impact for Open Access in the private sector and this study now seeks to review the position in the UK.

Open Access (OA) publishing has been a feature of research dissemination for two decades. The Public Library of Science (PLoS) briefly defines OA as constituting ‘free availability and unrestricted use’ but also recognises differences between OA providers in the extent to which permission barriers are removed. A simple distinction has been made between ‘Gratis’ OA, which removes only price barriers, and ‘Libre’ OA, which removes price barriers as well as (at least some) permission barriers. Cutting across this, there are two accepted models of Open Access. The first, ‘Gold’ OA, involves peer reviewed publication in an Open Access journal where all costs are borne by the disseminating parties – enabling others to have free access. The second model, ‘Green’ OA, involves publication in an institutional or subject repository. Compliance with the Open Archives Initiative standards ensures that repositories are interoperable, with some possibly providing ‘post-print’ access, others ‘pre-print’.

The focus of this study is on identifying, mapping and reviewing practical illustrations of benefits. In particular, the study looked at:

* Identifying and, where possible, quantifying tangible and attributable benefits in Open Access engagement to university research outputs.
* Identifying success factors and recurrent enablers to realising these benefits.
* Establishing illustrations of what and how benefits were realised, the timescale for realisation and transferability of that experience.

## Heading for the open road: costs and benefits of transitions in scholarly communications

**Author(s):** Commissioned by the Research Information Network (RIN), JISC, Research Libraries UK (RLUK), the Publishing Research Consortium (PRC) and the Wellcome Trust.

**Date:** April 2011

**URL:** <http://www.rin.ac.uk/our-work/communicating-and-disseminating-research/heading-open-road-costs-and-benefits-transitions-s>

The aim of the study is to provide evidence that will help the different constituencies involved in scholarly communication to understand better the dynamics of the transitions needed to improve access to research papers in a variety of ways; and the costs, benefits, opportunities and risks that this entails. Transition is understood to relate to changes in practice, business models and organisational culture within the relevant constituencies, and any new entrants, over the next five years.

# Open Badges

## Developing the series, information and designs for the Jisc RSC Scotland #openbadges

**Author(s):** G. Hamilton, Jisc RSC Scotland

**Date:** January 2013

**URL:** <http://www.rsc-scotland.org/eassessment/2013/01/15/developing-the-series-information-and-designs-for-the-jisc-rsc-scotland-openbadges/>

Grainne Hamilton explores the open badge system designed for Jisc Regional Support Centre Scotland, who provide support and advice to the further and higher education sectors in Scotland on the effective use of technologies in education.

## Using Open Badges to motivate participation and reward contribution in an online professional community

**Author(s):** C. Love, for Jisc RSC Scotland

**Date:** January 2013

**URL:** <http://www.rsc-scotland.org/?p=1613>

Encouraging contribution to online communities is a well-known challenge. CompEdNet, a Scottish online professional networking community for computer science teachers, have been working towards a solution for motivating contribution and engagement. They have developed a framework for rewarding positive behaviours by their members, through issuing digital badges using Mozilla’s Open Badge Infrastructure (OBI).

## 'Badges' Earned Online Pose Challenge to Traditional College Diplomas

**Author(s):** J.R. Young for *The Chronicle of Higher Education*

**Date:** January 2012

**URL:** <http://chronicle.com/article/Badges-Earned-Online-Pose/130241/>

The spread of a seemingly playful alternative to traditional diplomas, inspired by Boy Scout achievement patches and video-game power-ups, suggests that the standard certification system no longer works in today's fast-changing job market.

Educational upstarts across the Web are adopting systems of "badges" to certify skills and abilities. If scouting focuses on outdoorsy skills like tying knots, these badges denote areas employers might look for, like mentorship or digital video editing. Many of the new digital badges are easy to attain—intentionally so—to keep students motivated, while others signal mastery of fine-grained skills that are not formally recognized in a traditional classroom.