

Institution: The Open University

Unit of Assessment: C25 Education

Title of case study: Shaping the new open education policy and practice agenda

1. Summary of the impact

'Opening up education' is a sustained theme of the Centre for Research in Education and Educational Technology (CREET). Across more than 25 projects, active from 2008, our research has been instrumental in establishing and shaping the global agenda in open education, especially through open licensing of content and tools. Our evidence-driven and action research has two strands of impact:

1. Practice: leading change in educational systems and industry
2. Policy: influencing institutional, national and international strategy.

Our innovative collaborations and community engagement are international with examples of practice in Brazil, Africa and Europe, and strategic influences in USA, UK and the Commonwealth of Independent States.

2. Underpinning research

Recognised by the award of a Regius Professorship in Open Education (2013), CREET's depth of research in distance education led to foundational work in Open Educational Resources (OER). OER have since proved to be change agents for the educational industry and for international collaboration.

A series of substantive grant-funded research and development projects at The Open University (OU) gathered extensive research data by working with communities across education. Over 100 research papers and other outputs have been generated, establishing CREET as an international centre of open education expertise. It pursues ground-breaking research into how OER achieve their transformative effect and how their potential may be realised and extended.

OER are openly licenced resources that enable free access to learning. Understanding OER requires direct research on the role of openness, and the application of principles established from prior research in learning environments, reusable content and online pedagogy. Underpinning research (such as, Mason et al., 2005) created the appropriate context and knowledge for the OU to gain support for OpenLearn (2006-08), the first Hewlett Foundation funded OER project to have an explicit research strand. OpenLearn's model of action research shaped and influenced subsequent OER projects from the Hewlett Foundation and the national programme for OER jointly managed by the Higher Education Academy (HEA) and the educational technology charity JISC.

The practical outcome of OpenLearn was to establish a publishing process and site with 10,000 hours of open learning material, accessed by over 22 million visitors and with 200,000 registered users. Research outcomes were reflected in a widely cited report (McAndrew et al., 2009). Key insights from this research were:

- identifying cultural and social factors in reuse and open education adoption
- classifying learning behaviour in open education
- establishing roles for open education as a strategy within the education industry
- offering models for effective pedagogic, operational and business deployment of open education
- understanding of open innovation impact on education practice
- setting up a process for critical evaluation of evidence for claims in open education.

This unique foundation in open education has led to over 25 further action research projects in this area, from funding bodies such as charitable foundations, the European Union (EU) and the Higher Education Funding Council for England (HEFCE) including:

- OER Research Hub, supporting Open Education research for the Hewlett Foundation, investigating the key hypotheses of OER usage
- Open Learning Network (OLnet), to work collaboratively to generate evidence to support OER

policy actions

- Teacher Education in Sub-Saharan Africa (TESSA), identifying cross institutional and cultural issues in the use and customisation of OER (Thakrar et al., 2009)
- Support Centre for Open Resources in Education (SCORE), to support higher education in England to engage with employers, the third sector and professional bodies (Lane, 2012)
- openEd 2.0, trialling and evaluating a model for open course production and global open course delivery across institutions.

Key researchers

P. McAndrew, Professor of Open Education; M. Weller, Professor of Educational Technology; R. Mason, Professor of Educational Technology, (*died June 2009*); G. Conole, Professor of e-Learning, (*until Aug 2011*); F. Wolfenden, Senior Lecturer in Education and Development; J. Darby (*until 2012*), Director Higher Education Shared Solutions; A. Lane, Professor of Environmental Systems; Dr D. Clow, Lecturer in Interactive Media Development.

3. References to the research

Lane, A. (2012) 'A review of the role of national policy and institutional mission in European Distance Teaching Universities with respect to widening participation in higher education study through open educational resources', *Distance Education*, vol. 33, no. 2, pp. 135–50, DOI: 10.1080/01587919.2012.692067.

Mason, R.D., Pegler, C.A. and Weller, M.J. (2005) 'A learning object success story', *Journal of Asynchronous Learning Networks*, vol. 9, no. 1, pp. 97–105. ISSN: 1939-5256.

McAndrew, P., Santos, A., Lane, A., Godwin, S., Okada, A., Wilson, T., Connolly, T., Ferreira, G., Buckingham Shum, S., Bretts, J. and Webb, R. (2009) *OpenLearn Research Report 2006–2008*, The Open University, Milton Keynes, England. ISBN 9780749229252.

Thakrar, J., Wolfenden, F. and Zinn, D. (2009) 'Harnessing open educational resources to the challenges of teacher education in Sub-Saharan Africa', *International Review of Research in Open and Distance Learning*, vol. 10, no. 4. ISSN: 1492-3831.

Weller, M. (2012) 'The openness-creativity cycle in education – A Perspective', *JIME Journal of Interactive Media in Education* ISSN: 1365-893X Available at <http://jime.open.ac.uk/jime/article/view/2012-02>.

All journals named above employ an anonymised peer review process.

Research funding

2006-08: \$4.45m awarded by The William & Flora Hewlett Foundation to Patrick McAndrew, for a project entitled 'Open Content (OpenLearn)'.

2007-10: £270k funded by The ACP-European Union Cooperation Programme in Higher Education (EDULINK) to Robin Mason and then Martin Weller, for a project entitled 'Staff Innovation and Distributed Education in Caribbean, African and Pacific Countries'.

2008-10: £250k awarded by Allan & Nesta Ferguson Trust to Freda Wolfenden for 'Support for TESSA materials development'.

2008-14: £643k awarded by The William & Flora Hewlett Foundation to Freda Wolfenden, for (1) 'Use of OERs in teacher education' [£290k], (2) 'Strengthening existing development and use of OER in African teacher education through networking and research' [£180k], (3) 'Formative evaluation of TESSA' [£63k] and (4) 'Foundation strategies and structures for systemic adoption of TESSA pedagogy' [£110k].

2009-12: £1.7m awarded by The William & Flora Hewlett Foundation to Patrick McAndrew, for a project entitled 'Open Learning Network (OLnet)'.

2009-12: £3m funded by HEFCE to Jonathan Darby, for a project entitled 'Support Centre for Open Resources in Education (SCORE)'.

2009-12: £72k funded by seven European organisations to Patrick McAndrew, for a project entitled 'openEd 2.0'.

2010-11 : £44k part funded by the European Commission Education & Training to Grainne Conole (*until she left Aug 2011*) and then Patrick McAndrew (*until end of project*), for a project entitled 'Open Educational Quality Initiative (OPAL)'.

2011-13: \$750k funded by The Bill and Melinda Gates Foundation and The William & Flora Hewlett Foundation to Patrick McAndrew, for a project entitled 'Bridge to Success Project (BS2)'.

2012-14: \$1.5 m awarded by The William & Flora Hewlett Foundation to Patrick McAndrew, for a project entitled 'Open Educational Resources Research Hub'.

4. Details of the impact

CREET's research on OER enables us to make five claims for impact:

1. **Foundational research within OpenLearn was influential in establishing the legitimacy of new forms of open education.** Openness is now recognised as an important element in the education sector. Sometimes termed Massive Open Online Courses (MOOCs), an open and online approach to providing free education is gaining worldwide attention. Our research has underpinned the OU's own move to form a spin-out company (FutureLearn) for open courses with the British Council, the British Library, the British Museum and 22 other leading universities from the UK, Australia and Ireland.

The OU has established a combination of openly published findings and active collaboration in practice initiatives in many parts of the world. International investment in open education is apparent from venture capital, university investment and publishers, building on our evidence base of successful innovation.

2. **Collaborative OER have impacted positively on less developed countries and disadvantaged learners.** TESSA produced OER in collaboration with more than 100 African academics and 1000 African teachers. An independent evaluation report in October 2012 noted that almost 300,000 teachers were enrolled in programmes using TESSA OERs, while by July 2013 it was estimated that 500,000 teachers were using them. The evaluation report praised TESSA for its 'significant impact on the identity and practices of teacher educators, and a profound impact on those of teacher-learners'. They note the resources make 'child-centred, activity-based and reflective practice real and achievable'. The evaluators cited the sincerity and passion they encountered in the first-hand accounts of TESSA users.

TESSA has been awarded the Queen's Anniversary Prize for higher education (2009), the Leadership Award at the eLearning Africa conference in Dakar and a WISE award at the World Innovation Summit for Education in Doha, Qatar (2011). The success of TESSA led to a £4m grant from UNICEF for the OU Health Education and Training programme, to apply the open education approach to reach 250,000 health workers in sub-Saharan Africa; transfer the model to some of the most deprived regions of India (TESS-India), and fund free access in Africa to OER on agriculture (FARM-ED). The same principle of open collaboration has seen adoption of the Bridge to Success open content by charities working in deprived areas in Maryland, USA.

3. **OER research has influenced the education industry as a whole.** A 2011 European Learning Industry Group (ELIG) study raises the challenge of open education for the commercial industry and cites the OpenLearn report extensively. The Online Learning Task Force report to HEFCE in 2011 cites OU research on learning environments, OpenLearn and iTunes and concludes, 'We suggest that the JISC, the HEA and the Open University continue to promote the use and reuse of open educational resources across the sector'. The 2011 'Learner Use of Online Educational Resources' report for JISC cites OpenLearn as one of the few large scale projects doing sufficient research on impacts.

A 2009 report by the US-based Committee for Economic Development advising on policy issues states, 'We are fortunate to have ... a laboratory to further develop principles and best practices for co-creation and the growth of communities of practice. LabSpace at the Open University is engaged in such studies ...' (p. 30).

- 4. Fellowship work has identifiable international impact through shared research actions and informing policy.** In Russia, OLnet Fellow Svetlana Knyazeva from UNESCO established a research programme covering OER policy in 30 non-English speaking countries. She said, ‘the information I received during the [OLnet] fellowship at the OU improved my knowledge about OER, the relationships established with the members of the network support my professional activities’. The influential Creative Commons (CC) organisation has former OLnet Fellow Cathy Casserly as CEO. The OU is now affiliated with CCUK. Over 60 SCORE and OLnet fellows have established their own action research in partnership with employers, charities and professional groups such as nurses and the media, leading to new OER practice.
- Working closely with our funder, the Hewlett Foundation, the OU provides the research element in a programme that sees OER as a route to deeper learning. Their targeting of US policy has successfully led to the mandating of open licences as a component of the Department of Labor’s \$2b Trade Adjustment Assistance Community College and Career Training (TAACCCT) programme.
- 5. The success of OU research and projects has shaped open education policy in the UK.** For example, it informed the JISC/HEA UKOER programme funded by HEFCE, leading to integrated activities support provided by UKOER and our SCORE programme, and the JISC Jorum national repository for OER was influenced by the OpenLearn project in adopting open licences. The OU’s institutional policy continues to support the UK strategic response to online learning. Minister for Universities and Science David Willetts said ‘FutureLearn has the potential to put the UK at the heart of the technology for learning agenda by revolutionising conventional models of formal education.’

5. Sources to corroborate the impact

1. Bacsich, P., Phillips, B., and Bristow, S.F. (2011). *Learner Use of Online Educational Resources for Learning (LUOERL) – Final report*. [Impacts 1 and 3]
<http://www.jisc.ac.uk/whatwedo/programmes/elearning/oer2/LearnerVoice.aspx>
2. European Learning Industry Group (2011) *Open Education: a wake-up call for the learning industry?* White paper 2011. [Impact 3]
http://www.elig.org/images/stories/docs/articles/openeducation_a4.pdf
3. Online Learning Task Force (2011) *Collaborate to compete: Seizing the opportunity of online learning for UK higher education*. [Impact 3] http://www.hefce.ac.uk/pubs/hefce/2011/11_01/
4. CED (2009) *Harnessing Openness to Improve Research, Teaching and Learning in Higher Education*. [Impact 3]
http://www.ced.org/images/library/reports/digital_economy/dcc_opennessedu09.pdf
5. Harley, K. and Barasa, F. (2012) *TESSA: Formative Evaluation Report*. [Impact 2] Independent report available from: <http://www.tessafrica.net/Publications-Reports>
6. Halliday, L. (2008) *A History of Jorum, the Learning Resource Repository for UK Higher and Further Education (2002–2008)*. [Impact 5]
<http://www.jorum.ac.uk/squeeze/cms/media/4k2p4pqu610k.pdf>
7. Awards [Impacts 1 and 2]
OpenLearn:
Times Higher Leadership & Management Awards, 2010 – ICT Initiative (winner)
The Commonwealth of Learning, 2008 – Excellence for Distance Education Materials (winner)
IMS Global Learning Consortium Learning Impact Awards, 2007 – platinum award (winner).
TESSA:
Queen’s Anniversary Prize for higher education, 2009
eLearning Africa Conference, Dakar, 2009 Leadership Award for exemplary OER practices
World Innovation Summit for Education in Doha, Qatar, 2011 – WISE award.
Bridge to Success:
Maryland Distance Learning Association (MDLA), 2011 – Distance Learning Program
US Center for Digital Education, 2012 - Digital Educational Achievement Award
8. Creative Commons (CEO) OLnet Fellow [Impact 4]
9. UNESCO (Head of Digital Pedagogy and Learning Materials) OLnet Fellow [Impact 4].