Open Educational Resources in Opening up Education

Fred Mulder UNESCO Chair in OER at OUNL (former Rector OUNL 2000 – 2010)

EU Ministerial Conference OSLO, 9-11 December 2012



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UNESCO Chair in

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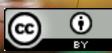
Resources

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OVERVIEW

- 1 Open Education: what's new?
- 2 OER in Open Education (OE)
- **3 What about MOOCs?**
- 4 Relax OE to 'Opening up Education' (OuE)
- **5 National OER Policies**
- 6 Government's responsibilities
- 7 Support and Commitment of IGOs
- 8 Conclusions



Images by Monique Vossen: Associations with Openness, in: 'OPEN BOEK: Over OER in Nederland'(OUNL, in Dutch)

Open Education: what's new?

Open Education: two worlds

CLASSICAL / **ESTABLISHED**

INNOVATIVE / EMERGING

Open and Distance Learning / ODL X **Open Educational Resources / OER** Lifelong Open Flexible / LOF learning Massive Open Online Courses / MOOCs OUs (incl. DTUs) Wide variety of Initiatives Variety of Associations / Consortia MIT OERu P2Pu edX Coursera ICDE EADTU AAOU ACDE OCWC CC Hewlett F. OpenEd **Communities Forums Conferences Conferences Seminars Taskforces**

One Century(+)

One Decade





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The fundamental OU model: 6-fold Classical Openness

Open Access (Entry) Freedom of Time Freedom of Pace Freedom of Place Open Programming Open to People (LLL)

Openness not as a **Doctrine** or **Dogma** but as a Carrying Concept





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Supported Open Learning **Tutored Self-Study**

Carried by high-quality learning materials developed for independent learning integrated with didactics and tutoring elements





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General mainstreaming: 4-fold Digital Openness Family regarding free online availability: Open Source (software) Open Access (scientific output) Open Content (creative output) **Open Educational Resources / OER**

(learning materials)





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OER in Open Education (OE)

Open Educational Resources

"... are digital learning resources offered online freely and openly to teachers, educators, students and independent learners in order to be used, shared, combined, adapted, and expanded in teaching, learning and research." (OECD 2011)

"... are teaching, learning and research materials in any medium that reside in the public domain and have been released under an open licence that permits access, use, repurposing, reuse and redistribution by others with no or limited restrictions." (UNESCO 2011)





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OER is NOT (Open) Education more components are required ...





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Open Learning Services (OLS) Complementary to OER, free or to be paid, and including a variety of online and virtual facilities for: tutoring, advice, meetings, communities, teamwork, presentations, testing, examination, consulting sources, internet navigation, etcetera ...





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Open Teaching Effort (OTE) Complementary to OER and OLS, to be paid for, referring to the human effort in different roles: developing, presenting, explaining, assessing, communicating, interacting, intervening, mediating, etcetera of teachers and educators (and with the *learners* in their specific role) in a professional, open, and flexible learning environment and culture.





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Open Education (Supply)

Open Education (**OE**) OLS OTE

OER





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Open Education (plus Demand)

Open to Learners **Needs**

OEC OLN Open Education (OE)

OER

Open to Employability & Capabilities development





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Demand side: OLN and OEC

Open to Learners Needs

affordable, rewarding, good quality, feasible, enjoyable, but also: freedom of time / pace / place, open entry, open programming, credentialing, bridge between formal and informal learning, lifelong learning,

Open to Employability & Capabilities development fit to labour market in change, innovation, globalization, knowledge-based society, entrepreneurship, but also: with new concepts and skills, critical thinking, ethical attitude, personal growth, social-cultural behaviour, ...





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What about MOOCs?

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MOOCs in variety...

Massive Open Online Courses

initiated by Stanford University / Norvig & Thrun in autumn 2011 on 'Artificial Intelligence' (+ 2 other courses) with > 160.000 participants (23.000 'completed'), followed by more Ivy League and other Universities

But: first MOOC was launched earlier ...

at University of Manitoba / Siemens & Downes in 2008 on 'Connectivism and Connective Knowledge' with 25 (paying) students plus 2.300 participants (free)

Therefore now: cMOOCs and xMOOCs, plus ...

Booming with large variety: consortia versus companies different categories / types See next slide!!!





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|--|----------|--|-------------------------------|---------------------|-----------------------|
| | Offering | Feedback | Certificate | Pacing | Didactics |
| EdX (Consort.) | Courses | Instructor/ automated | Achievement | Paced | Instructor led |
| Udacity (Company) | Courses | Instructor/ automated | Achievement/ Participation | Paced | Instructor led |
| Coursera (Company/ Consort.) | Courses | Instructor/ Automated/ Peer | Achievement/ Participation | Paced | Instructor led |
| Ted Ed | Lectures | | | Self-directed | Instructor led |
| Khan Academy | Lectures | | Badges | Self-directed | Instructor led |
| сМООС | Courses | Peer | None/Achievement/ Badges | Paced | Connec- tivism |
| MMOOC (MIT) | Courses | Peer/Instructor | Badges/Recognition | Paced | Connec- tivism |
| Saylor.org | Programs | | - A Shark I | Self-directed | Instructor led |
| OERu | Programs | - | Diploma | Self-directed | May vary p. course |
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Historical perspective (1) Reaching out to many ...

Classical / Established Innovative / Emerging

In Open Universities missions Efficiency with large numbers Driven by EU Open Universities Reputation in quality education => Mega-universities (Turkey, China, India, S.Africa, ...) 'All-inclusive' model Learner-centred

Universities service to society? Marketing for big target groups Initiated by US elite Universities **Reputation in excellent research** => Mega course-offerings (US dominant, English language, ...) 'Split-component' model **Teacher-centred**





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Historical perspective (2) Reaching out to many ...

Classical / Established Innovative / Emerging

Focus on formal learners Origin before the Internet (print) Basis in classical openness (Very) large-scale education References:

Daniel, J. (1996), 'Mega-Universities and Knowledge Media: Technology Strategies for Higher Education'. Kogan Page, London

Asseldonk, T. van, & Mulder, F. (2004), 'Mass-individualization of higher education for the knowledge-based society'. EADTU Conf.

Focus on informal learners Origin in the Internet (online) **Basis in digital openness** Massive education (MOOCs) References:

Cormier, D. (2010), 'MOOCs, Knowledge and the Digital Economy - a research project'

Daniel, J. (2012), 'Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility'





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Criticism from the OE World OpenED12 Conference, Oct. 16-18, Vancouver no keynote dedicated to MOOCs in spare attention: negative, jokingly or even downgrading Indeed MOOCs are not as open as ... should be in OE: no adaptation or arrangement would be desirable: no open licensing (CC) could be in learning: pretty basic model But MOOCs are also ... a very important change agent, not in the least by the Ivy League involvement, whether you like it or not





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Relax OE to 'Opening up Education' (OUE)

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Opening up Education (OuE) seems a subtle change but is pretty relevant ... **OuE underlines the dynamics and the process** (there is no fixed model for education over time) **OuE can adequately accommodate diversity** (there is no single ideal model for education) brings in nuance and offers an umbrella for: > Open Educationalists, MOOCers, and other devotees < > Elite Universities, Open Universities, and the wider variety < > Educational Institutes from primary through university level <</p> > Learners with their diversity in needs and circumstances <</p>

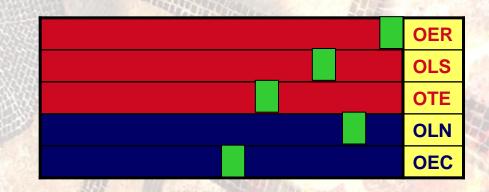




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Institutional Position/Profile in OuE - at a certain point in time -



Institutional 'Fingerprint' (example)

Would not recommend to have all switches extreme left or extreme right. **Except for OER:**

Extreme right would be fine for all institutions independent on profile, if there would be a national policy ...





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National OER Policies

Emerging National Policies ...

2007 – / India

NKC / Report to the Nation 2007: Embracing OER Launch of a 'National E-content and Curriculum Initiative' Major effort with a large variety of follow-up activities and projects

2009 – 2013 / The Netherlands (€ 8,0 million) National Wikiwijs Program (OUNL & Kennisnet leading) Mainstreaming OER in all educational sectors

2011 – 2014 / USA (\$ 2,0 billion)

US Dept. of Labor and Dept. of Education run a 4-year program to create OER for community colleges and career training. CC BY licence required for grant outputs





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Other countries promote OER through:

> specific measures <</p> > provision for collaboration < > financial support <

or are considering a national approach to OER

e.g. Brazil, China, Indonesia, Japan, Korea, Poland, Slovenia, South Africa, Turkey, UK, Vietnam





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The Dutch case: Wikiwijs - VISION

"Teachers in the Netherlands, from primary to university education, should have the freedom and opportunity to make use of user-friendly open (and closed) educational resources in their teaching activities as they see fit. To this end, all teachers should have access to a central platform where they can find, use and adapt digital educational resources. Here, teachers can develop, store and share their own educational resources with colleagues, but also combine open educational resources with closed educational resources. The central platform will stimulate the development of open educational resources and contribute to improving the status and professionalism of teachers.

This will enhance *quality*, improve *efficiency* and contribute to the *accessibility* as well as boost *innovation* in education."





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Wikiwijs Program: Highlights Dec. 2008 / LAUNCH of Wikiwijs by Minister Ambitious and complex Program 2009 - 2011 / INITIAL IMPLEMENTATION Intense user evaluation Many committed stakeholders Good progress, and ... bottlenecks and lessons 2011 - 2013 / SUSTAINABLE PERSPECTIVE Fully utilize user participation Clearly differentiate between the educational sectors Establish firm ownership with relevant partners in those sectors Human factor decisive / Long route (10-15 years)

See video at:

http://www.youtube.com/watch?v=5jbAiH_NJwQ





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Government's responsibilities

Clearly concluded in ... Last sentence in the Vision behind Wikiwijs: This will enhance quality (1) improve <u>efficiency</u> (2) and contribute to the *accessibility* (3) as well as boost innovation in education **Refers directly to the 3-fold promoting and ensuring Government's Responsibility for Education!**

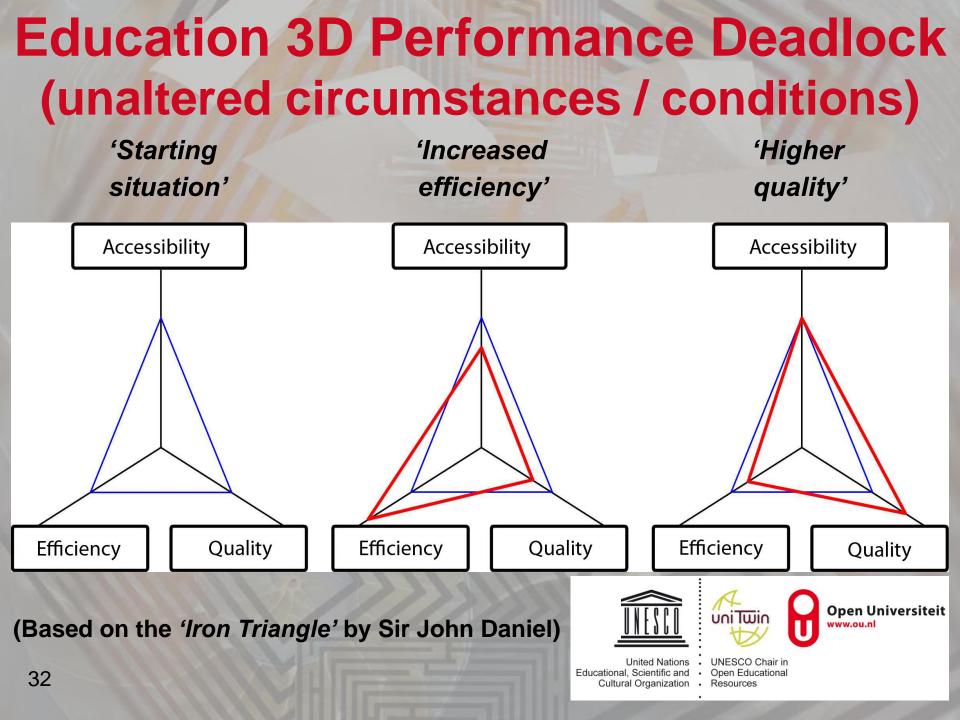




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Hypothesis

Performance *improvement* along one dimension inevitably deteriorates the performance along one or both of the other dimensions, at least at unaltered circumstances and conditions

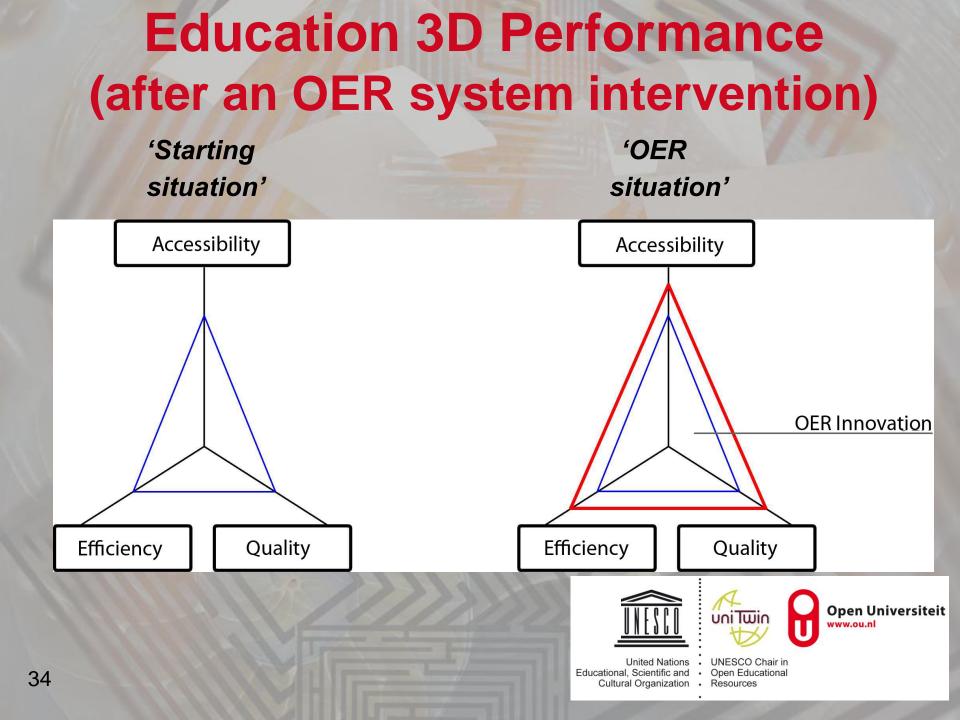




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The OER System Intervention ...

... facilitates performance improvement along all three dimensions simultaneously:

- **1** Accessibility by free online availability of learning materials
- 2 Quality by involvement of many experts and users in various roles
- 3 Efficiency by not replicating other's efforts

... and adds an extra dimension:

4 Innovation Note This powerful 'logic' holds for OER, not (necessarily) for **OE** as a whole 35





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Support and Commitment of IGOs

UNESCO and **OECD**

UNESCO

Since 2002 a very active player (coined the term OER) As of 2011 UNESCO Chairs in OER (at OUNL, Athabasca) June 2012: World OER Congress (organized with COL) Survey: OER activity in a lot of countries, but many have made no steps yet 2012 Paris OER Declaration new milestone

OECD

2011-2012 Questionnaire shows OER activity in 23 countries, where 11 have a *national OER policy* in place or under development Preparing for an OER Recommendation in 2013 or 2014?





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European Union ...

with 'Opening up Education' is preparing JIT for a breakthrough move

is in an effective position with its tools: policy guidance, EU regulation, EU funding schemes, exchange of good practices, innovative pilots, ...

can inspire, mobilize, facilitate, and support EU countries and educational institutes in their OuE endeavours

can harmonize, create synergies, underline diversity (when appropriate) among EU countries and educational institutes

can add value in the global educational market





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EU: 'Opening up Education' Perspective of OuE?

Successor of the remarkably successful 'Bologna' for HE, an *innovation* where top-down and bottom-up merged, with a *shared* feeling of *momentum* and a *clear goal*: contribute to mobility, quality, and harmonization

'Opening up Education', significant for all educational sectors, an innovation where top-down and bottom-up are merging, with an *upcoming* feeling of *momentum* and a *clear goal*: contribute to accessibility, quality, efficiency, and innovation

But mark the previous note This potential is clear-cut for OER, but not for OE as a whole





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CONCLUSIONS

Conclusions

- 1. There are both 'classical' (OUs) and innovative (Digital) drivers for Open Education
- 2. OER ≠ Open Education (but among 5 components of which 3 in Supply and 2 in Demand)
- 3. MOOCs stand for a new revolution in 'Opening up Education' (NOT in Open Education) and could become a very important change agent
- 4. OuE is a well-chosen umbrella for the EU Initiative (thereby NOT promoting one single ideal model)
- 5. With **OuE Europe** is orchestrating JIT a **decisive** move in the OpenEd world uni Twin





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Conclusions, more...

- 6. National OER policies are rapidly emerging, with strong support from IGOs, and are argued to serve well government's responsibilities for Education
- 7. OER potentially is the most significant in OuE, being beneficial for all educational institutions, regardless of their educational philosophies and more in general the political context
- 8. OuE/OER could go the 'Bologna' way, that is to become a major European innovation in Education
- 9. OuE/OER could make the current educational system more sustainable! uni Twin





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Thanks for your attention!

IN TOUCH WITH THE DUTCH

KEEP

Contact: fred.mulder@ou.nl

RECOMMENDATIONS

- a. Give OuE a decade to become full reality
- b. Focus on mainstreaming OER (ambitious and difficult enough)
- c. Design effective fits and incentives in national funding schemes and regulations
- d. Reflect on measures how to change the human factor from being a barrier into becoming a carrier
- e. Initiate a *fundamental dialogue* with the private sector, in particular the publishers, on changing opportunities





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RECOMMENDATIONS, more ...

- f. Be quick in a European MOOCs move (Note: European OUs are preparing a substantial collective initiative to be launched early 2013)
- g. Create a strong European OuE/OER research base to underpin policies and implementation (Note: Global OER Graduate Network started Sept. 2012)
- h. Do NOT reinvent the wheel in a European legal and licensing framework but join forces with CC
- i. Cherish educational variety in the member states and cultural and language diversity within the EU





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