

Open Educational Resources Policy Document: institutional-level analysis

Introduction

Literature review: see the complete bibliography at the end.

In a nutshell, there seems to have been two distinct periods of interest in Open Educational Resources (OER), one starting in the late 1990s continuing into the early 2000s, and a second, starting less than a decade later, up to the present time. The in-between years are a time when OER theorists are mostly preoccupied with the sudden waxing and subsequent waning of the MOOC phenomenon (at least in North America), perceived at the time by theorists and practitioners alike as the epitome of OER development. Therefore, we will first look at the most-cited publications with regard to the emergence of the OER concept and how it was defined by its earliest proponents and then look at what more contemporary authors are saying.

Period 1: Learning Objects research: Wayne Hodgins is generally credited with coining the concept of “*learning object*” (LO) in 1994 (Wiley, 2006) and David Wiley with the term “*open content*” in 1998 (Baca, 2014). UNESCO then added the concept of “*open educational resource*” (OER) to our lexicon in the *Paris Declaration* (UNESCO, 2012) in which they contextualise OER in light of other “*international statements*” and make ten policy recommendations addressed at member states. In 2003, Littlejohn & Buckingham’s seminal, 19-chapter, *Special Issue of the Journal of Interactive Media in Education* clearly demonstrates the deep interest of researchers in Europe and North America for OER design and development (NB. Chapter 4 is missing from the issue.) Sadly, there is a lack of distinction between OER use in K-12 and HE. Nonetheless, noteworthy among these chapters is the introductory chapter by Littlejohn in which the author stresses the huge demand for learning which is, in turn, fuelling the need for “learning objects”, or LO (as OER are termed in this collection of chapters), yet this chapter also highlights numerous problems facing their development and deployment. Also germane to our UFN preoccupations are chapters that question the composition and hierarchy of LOs. In short, given that many of these chapters are written by authors working within the open university system which was initially and primarily based on a behaviourist, transmission model of learning, LO development is their *modus operandi*, indeed the main task of faculty. As a result, there is a natural tendency to promote such development in theory, although free deployment of such remains a sore point, in practice¹. Some years later Vest (2007) reports some data about one of the most famous LO platforms, the MIT Open CourseWare: at that time, the website totalized more than one million visits per month, with 20% of the visitors coming from Latin America, Eastern Europe, the Middle East, the Pacific Region, and Sub-Saharan Africa. In order to bridge the digital divide, MIT launched local mirrors that proved to be quite effective. Indeed, among contemporary learning theorists (such as Wiley), a more constructivist view emerges that questions the potential for usefulness of non-

¹ To wit, Athabasca University, one of the most vocal promoters of OER, has only proved free access to 18 of its over 700 courses (<http://ocw.lms.athabascau.ca/>). It is our view that such access should be seen as more of a marketing strategy (i.e. *loss leaders*) than as a full commitment to open access.

contextualised OER for learners, especially in higher education, and especially if they are non-modifiable, as are the majority (Laurillard, 2012). Finally, despite there being many seminal contributions in this Issue, we feel Wiley’s *Introduction to Part 2* should be referenced, in that he is critical of an OER-fired, artificial intelligence-directed movement being essentially a “drive to remove expensive humans from the learning experience loop, (which) is an insidious form of cultural or epistemological imperialism”. In another publication (Wiley, 2003), Wiley uses two criteria to estimate learning object (LO) reusability: **pedagogical value** (PV) and **potential for reusability** (PR) (see Figure 1 below). Briefly, Wiley is saying that the PV of an LO diminishes as its PR increases, and vice-versa. Power, below, extrapolates that PR will likely vary according to *level of content complexity/academic level* and identifies three trends based on academic level. For instance, in higher education, given the relatively higher level of content complexity of LOs (compared to K-6 and secondary/technical levels), one must opt for either PV or PR, but one cannot have both. Hence, polarisation likely occurs at each extremity of the curve; the addition of nodes indicates the choices made by the majority of users, especially in the case of graduate-level courses where LOs provide very specific and very complex content. On the one hand, should one wish to imbue them with high-level PV, one must make them context-linked. On the other hand, should one wish to make them reusable, one risk losing a proportional degree of their complexity. Hence, a choice must be made: keep the LO superficial and thus gain broad appeal, or get into the “nitty gritty” detail but lower PR. An example of such would be tailor-made course content, i.e. a lot of depth but virtually no reusability in another context. How much complexity must one sacrifice to make OER reusable? If the course content is for K-6, there is probably very little loss, hence the corresponding bulge in the curve, indicating high PV and PR. If it is secondary/technical, one would probably lose in complexity what one gains in reusability, i.e. a more proportional gain/loss, so a diagonal line would be appropriate.

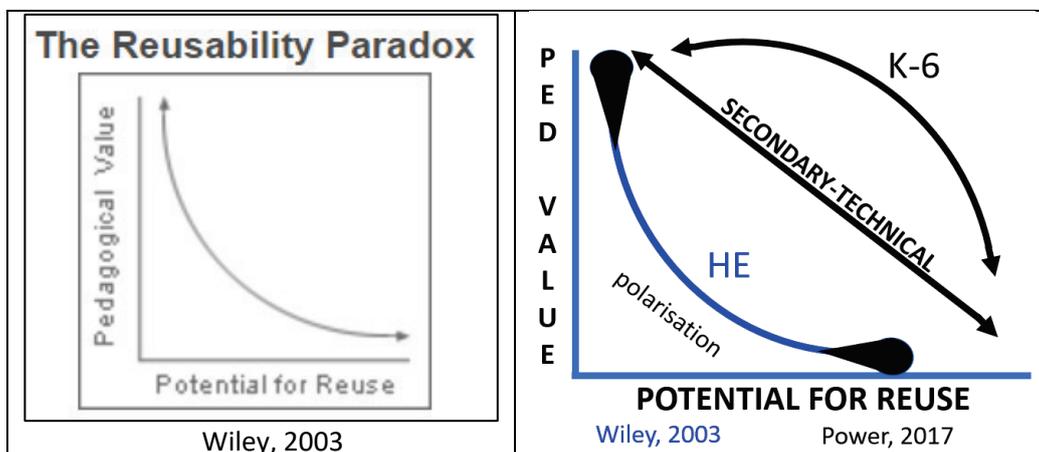
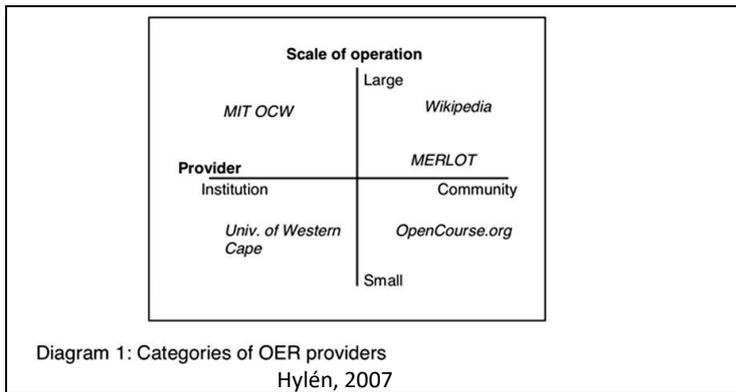


Figure 1: Wiley’s Reusability Paradox and Power’s Variable Reusability Paradox.

Among other key works we must mention are Hylén’s 2006, OECD-sponsored work. He states: “There are many **critical issues** surrounding **access, quality and costs** of information and knowledge over the Internet as well as on provision of content and learning material”; “...the OECD/CERI study which aim to map the scale and scope of Open Educational Resources initiatives in terms of their purpose, content, and funding...”; “The **two most important aspects of openness** have to do with free availability over the Internet and as few restrictions as possible on the use of the resource”. Hylén also adds a useful diagram that

positions *Scale of operation (large-small)* and *Providers (Institution-community)* on a Cartesian plane whilst proving examples of each category.



d'Antoni (2007), of the UNESCO International Institute for Educational Planning, provides an overview of the OER world community's needs and perspectives; noteworthy is "the primary objective of the Open Educational Resources movement, the sharing of knowledge worldwide"; "the community reflects upon a concept that seeks to equalize access to knowledge worldwide". Particularly enlightening is her table 1 in which she presents the varying "priority issues" as identified by developed and developing countries.

| Developed countries | | Developing countries | |
|---------------------|---------------------------------|----------------------|---------------------------------|
| 1 | Awareness raising and promotion | 1 | Awareness raising and promotion |
| 2 | Communities and networking | 2 | Capacity development |
| 3 | Sustainability | 3 | Communities and networking |
| 4 | Quality assurance | 4 | Technology tools |
| 5 | Copyright and licensing | 5 | Learning support services |
| 6 | Capacity development | 5 | Research |
| 7 | Accessibility | 7 | Policies |
| 8 | Financing | 8 | Quality assurance |
| 9 | Standards | 9 | Financing |
| 10 | Learning support services | 10 | Sustainability |
| 11 | Research | 11 | Accessibility |
| 12 | Policies | 12 | Copyright and licensing |
| 13 | Technology tools | 13 | Standards |
| 14 | Assessment of learning | 14 | Assessment of learning |

d'Antoni, 2007

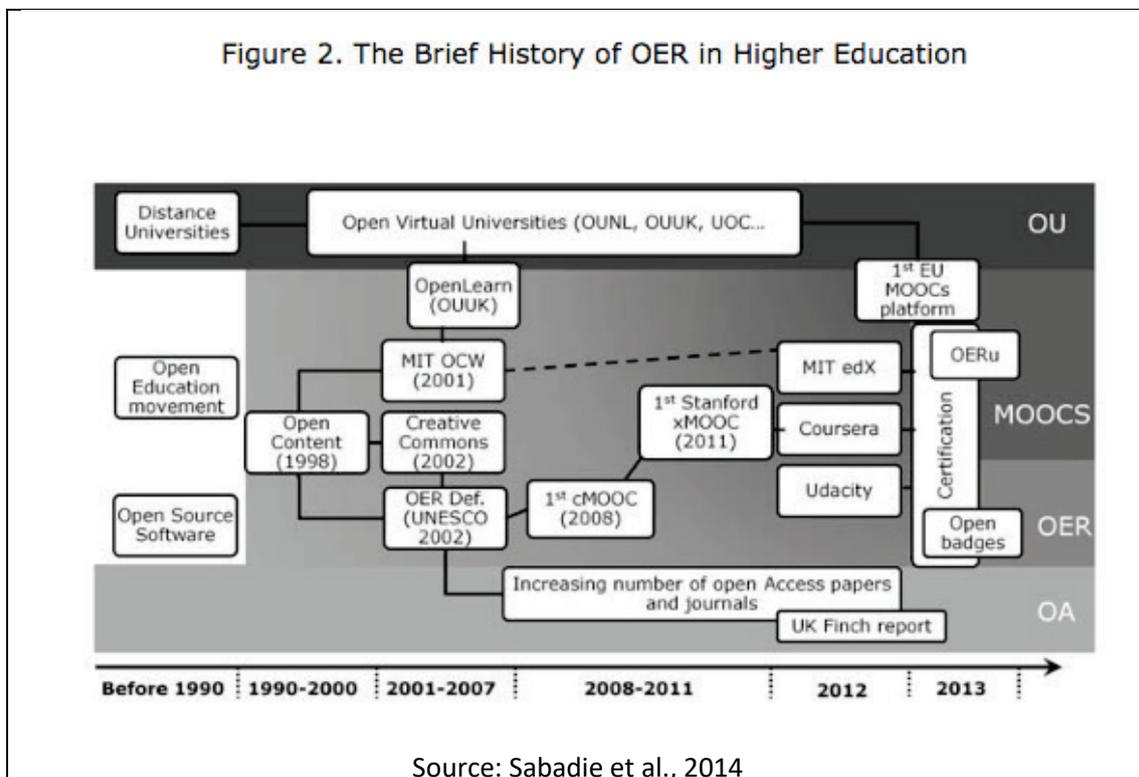
Of particular interest to UFN is the following statement: "*higher education institutions... (have been) identified as the lead organization for OER. And it was the university's primary functions –research and supporting learning – that were cited most frequently*".

Finally, there is OECD's 2007 publication, *Giving Knowledge for Free*, with main author Jan Hylén. Its title is highly typical of OER literature and quite revelatory with regard to its understanding of learning theory, i.e. *knowledge can be given/transmitted*, clearly a behaviourist-based concept that, in educational circles, is no longer current. It is clear that OER, in the mind of the authors of this OECD publication, equals knowledge, hence the focus on content. What is actually done with OER in the classroom is not as clear.

The in-between years: MOOCs

During these years, between the early and late 2000s, a hiatus in thinking about OER as LOs seems to have occurred among theorists, given an overriding preoccupation with getting MOOC initiatives (as complete collections of OER) off the ground. Indeed, MOOCs became the poster-boy for online learning (OL). Yet by the time the New York Times proclaimed 2012 as the *Year of the MOOC*, the phenomenon was already waning. At least in North America. University MOOC initiatives were already winding down, victims of a disproportional enrolments versus learning outcomes ratio. In short, MOOCs were a misnomer: they were not courses after all, but rather OER simply dumped online, often pell-mell, for free. In hindsight, the low MOOC completion rates may have done online learning (OL) a huge disservice, perhaps setting it back a decade or more with regard to its credibility in higher education.

Figure 2 (Sabadie, Muñoz, Puni, Redecker & Vuorikari, 2014) presents an overview of the “open movement”, distinct from yet associated with distances universities, and its evolution towards greater and greater public access of OER. As stated earlier, the MOOC phenomenon occupies the middle space, spawning a variety of initiatives. To the right, a proliferation of initiatives are noted, as we currently stand.



And then came **Period 2...** from Learning Objects to a renewed focus on OER:

- **UNESCO Paris OER Declaration (2012).** This declaration sought to bring some order to the OER initiative by clearly defining just what constituted an OER and by making ten recommendations to member states with regard to their dissemination and sharing.
- **Laurillard (2012).** This author emphasizes the need for sharing the “*design workload*” through the use of OER repositories, yet recognizes their underuse “*by*”

the great majority of teachers". "We have not yet developed a strong culture of building on the work of others in designing teaching".

- **Sabadie et al. (2014)**. The authors state that there are distinctive differences in the use and promotion of OER in K-12 and higher education respectively. Higher education is currently the most advanced sector in the deployment of OER as shown by the boom of MOOCs. However, continental Europe is not embracing OER with as much enthusiasm as other regions of the world, like the USA or Brazil.
- **McGreal, Anderson & Conrad (2015)**. This publication highlights Canadian initiatives in the field, especially the beginning of open access textbooks in Western Canada, yet by emphasizing individual, relatively small-scale contributions, the authors demonstrate the degree to which OER production and deployment are still in their early stages in mainstream higher education, even in a leading country such as Canada.
- **Hollands & Tirthali (2015)**. This short but well-written book focusses on the MOOC phenomenon and convincingly describes its wildfire spread and subsequent trend toward extinction. In speaking of the future of MOOCs as OER, they not surprisingly assess that future MOOCs will likely be less massive and less open in order to boost enrolment rates. Peer learning and support is also seen as a major trend, even student-produced OER.
- **Miao, Mishra & McGreal (2016)**. This UNESCO-sponsored publication entitled *Open Educational Resources: Policy, Costs and Transformation* presents 19 case studies from around the world. Despite the obvious promise of such initiatives, once again the small scale and relative small size of these initiatives reinforce the idea that OER deployment is still in its infancy. It seems stalled at the source: academics who have no incentive to produce such, even less to share such.
- **Annand & Jensen (2017)**. Just published, this IRRODL Special Issue is focussed precisely on OER, their production, deployment and current state. The editors are unequivocal: "*Substituting open educational resources (OER) for commercially-produced textbooks results in demonstrable cost savings for students in most higher education institutions. Yet OER are still not widely used, and progress toward large-scale adoption in most colleges and universities has been slow*".

Future vision. Challenges and opportunities

University professors, even that small minority actually interested in teaching and learning (T/L), generally approach the subject from a research perspective rather than a professional development perspective, i.e. they study T/L and publish about it for their peers, not for their students. It is an open secret that faculty, largely and for purposes of career promotion, are far more preoccupied with their research than they are with their teaching, hence the paucity of any widespread OER development in higher education. Indeed, the production of textbooks are seen by researchers as non-scientific productions and, as such, are not generally recognized for promotion and career advancement. Another barrier to textbook production is the backlash from students at what they perceive to be faculty enrichment at

their expense². Such contemporary realities severely hinder the OER movement in HE and it is thus not surprising that OER have not proliferated at this level. Nonetheless, sharing initiatives such as Commonwealth of Learning's are bound to increase and multiply especially in developing countries where barriers are relatively lower in light of the dire needs in which HE systems in many countries find themselves. Indeed, it is our view that, should a breakthrough occur, it will likely be in developing countries rather than in developed countries, as the stakes regarding the status quo are far higher in the latter.

Policy tracks: Channels and strategies for change

As mentioned early by d'Antoni, "*higher education institutions... (have been) identified as the lead organization for OER*". And among universities, the single-mode, open/distance education universities (DEUs) have been very vocal in their support for such. However, there seems to be a disconnect between actual discourse and practice within these institutions, as such institutions actually make very few of their resources available for free to the general public, even to other institutions. Indeed, their business model is based on **selling** such resources within the confines of their courses that require enrolment for access, not on giving them away. Indeed, more suspicious minds might even see the DEU commitment to OER development and proliferation as simply a strategy to self-promote rather than, as UNESCO would wish, to "share knowledge worldwide" (d'Antoni, 2007).

In our view and within the limits of this short paper, OER development within mainstream higher education will likely occur under conditions such as these:

- Universities recognise teaching in a professor's workload as an as valuable a service as research, and faculty are not penalised in their careers for devoting as much time to their teaching as they do to their research;
- Faculty recognise the development of OER by their peers as being worthy of consideration in cases of career promotion and award; in turn, institutions of higher education (universities) and national (or state/provincial) Departments of Higher Education make policy changes with regard to career promotion that recognise the value of faculty production of OER;
- Faculty-produced OER are subject to peer-review in the same way research publications are, and networks for peer review are established; subsequently, networks for sharing OER locally, nationally and internationally are systematically set up on a field-by-field basis;
- Awards are created for OER, locally, nationally and internationally, to promote OER production and sharing and award-winners are recognised for their endeavours;
- The universal adoption of licences such as Creative Commons is effected so as to not only protect intellectual property (IP) but also allow for rapid dissemination through open access copyright.

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² See: "*professors may seem to be inappropriately enriching themselves at the expense of their students*". <https://www.aaup.org/report/professors-assigning-their-own-texts-students>

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