

Open Access to Educational Resources: The Wave of the Future?

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Abstract:

This paper analyzes the challenges and prospects in providing open access of educational resources in the UP Open University. It specifically benchmarks open access policies and practices in some universities around the globe and reflects on their possible application in the University. It infers some ingredients or prerequisites for such policy and practice to flourish. It also chronicles some issues, concerns, conflicts and reforms so that this sharing and innovation in open and distance learning may be a sustainable wave of the future today.

A. Introduction

In a brave new world of learning, open access (OA) to educational resources (OER), aided by the Internet, has revolutionized the education system. It has been invoked as a right of learners to participate within the knowledge society (Rossini, 2010). It has also evolved into a bundle of rights, e.g., right to be a creator, to govern and develop one's own knowledge, to use, reuse, recycle, rework and share with others. Advocates are also of the opinion that the right to make and distribute content should not be held solely by business or by those in the wealthy societies basically because “knowledge itself is a collective social product, one that naturally forms a commons (or a public good) that needs to be accessible to all.” (Mc Andrew et al., 2010)

In the real world however, advocacies do not always fall on receptive minds. Policies and practices on OA and OER require being accepted as the right decisions. Also, stakeholders need to be convinced that these are the correct and better strategies to do at this digital age.

It is against this backdrop that this paper was written. It analyzes the challenges and prospects in providing open access of educational resources in the UP Open University (UPOU), the cyber campus at the forefront of open, distance and e-learning in the Philippines. It specifically benchmarks OA and OER policies and practices in some universities around the globe and reflects on their possible application in the country. It infers some ingredients or prerequisites for such policies and practices to flourish. It also chronicles some issues, concerns, conflicts and reforms so that this sharing and innovation in open and distance learning may be a sustainable wave of the future today.

B. Overview of the OA and OER Movements

Open Access has grown into a movement advocating the bringing of knowledge to as many people as possible for free and in the end, improving the quality of education worldwide. OA is a “knowledge-distribution model by which scholarly, peer-reviewed journal articles and other resources are made freely available to anyone, anywhere over the Internet” (Rossini, 2010).

It has grown simultaneously with the open education (OE) movement, which is based on a set of core values shared by a remarkably wide range of academics: that knowledge should be free and open to use and reuse; that collaboration should be easier, not harder; that people should receive credit and kudos for contributing to education and research; and that concepts and ideas are linked in unusual and surprising ways and not in the simple linear forms that today’s textbooks present (Baranuik, 2007).

OE promises to fundamentally change the way that authors, instructors, and students interact worldwide. The OE movement takes the inspiration of the open source software movement (GNU Linux, for example, [Raymond, 2001 as cited in Baranuik, 2007]), mixes in the powerful communication abilities of the Internet and the World Wide Web, and applies the result to teaching and learning materials like course notes, curricula, and textbooks (Ibid.).

Open educational resources (OER), meanwhile are “digitized materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research.” (OECD, 2007) They are “technology-enabled, open provision of educational resources for consultation, use and adaptation by a community of users for *non-commercial purposes*” (UNESCO, 2002, underscoring mine). They include learning objects such as lecture materials, references and readings, simulations, experiments and demonstrations, as well as syllabi, curricula and teachers’ guides (Ibid.)

OA, OE and OER promote the free use or sharing of materials, and in some cases, allow changing and sharing again, made possible through licensing, so that both teachers and learners can share what they know. The movements draw support from big universities around the world, e.g., Massachusetts Institute of Technology, Harvard, Cambridge, Stanford, etc. as encouraged by development organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), the William and Flora Hewlett Foundation, the Organization for Economic Co-operation and Development (OECD), and others. It has infected the Asia and Pacific regions, the Asian Association of Open Universities (AAOU) and the rest of the world.

OA is an important policy for developing countries. If implemented well, OA can create the core conditions for knowledge transfer. In addition, according to Rossini (2010), OA is a strategic counterpoint against “brain drain,” since it provides broader and faster opportunities for scientists from any country to publish their work to the global audience without needing to permanently leave their home. For example, e-print and pre-print services like arXiv (<http://arxiv.org/>) and Nature Precedings

(<http://precedings.nature.com/>) save months of time to reach scientists and other stakeholders, compared to print and other non-digital social networks (e.g., face-to-face conferences) (Rossini, 2010) .

From a community of learners' perspective, OA also empowers the society at large, since it allows communities and institutions to manage the scientific information to which they have access, by allowing translation into local languages, aggregation of literature into "virtual journals," integration between information and data, and text mining and navigation through the web, when licensed through open licenses such as those of Creative Commons. Additionally, OA naturally improves communication by encouraging open distribution, fostering partnerships, and strengthening scientific cooperation and collaborative approaches to problems that are common to developing countries, such as AIDS and neglected diseases. An example of this process is the *PLoS Neglected Tropical Diseases* journal (<http://www.plos.org/cms/node/188>).

As the true benefit of OA and OER seems to be the interaction, the access to the debate, and to the negotiation of knowledge (Cormier and Siemens, 2010), these may be considered as new ways of thinking about technology transfer—not as a gift of "free stuff" without cost, but as a philosophy of democratized digital knowledge governance (Mc Andrew et al., 2010). In giving access, OERs help equalize the distribution and sharing of new knowledge to everyone regardless of income status, race, gender and other considerations.

C. Open Access Policies and Practices

For over a decade, *open* has been used as an adjective to modify a variety of nouns that describe teaching and learning philosophies, strategies and recently, materials. For example, open content, open educational resources, open courseware, and open textbooks are all part of the current higher education discourse. In this context, the adjective *open* indicates that these textbooks and other teaching and learning resources are provided for free under a copyright license that grants a user permission to engage in the "4R" activities:

- *Reuse*: the right to reuse the content in its unaltered/verbatim form (e.g., make a backup copy of the content)
- *Revise*: the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
- *Remix*: the right to combine the original or revised content with other content to create something new (e.g., incorporate the content into a mash-up)
- *Redistribute*: the right to share copies of the original content, the revisions, or the remixes with others (e.g., give a copy of the content to a friend) (Wiley, 2010a)

Not everyone though is sold to the idea of open educational resources and open access.

D. Lessons Learned: Obstacles and Success Ingredients

From the OECD (2007) study, the following are the underlying drivers (success ingredients) and inhibitors (obstacles) for developing and sharing OERs:

Underlying Drivers	Underlying Inhibitors
Technical: Increased broadband availability; increased hard drive capacity and processing speed; new and improved technologies to create, distribute and share content; simpler software for creating, editing and remixing.	Technical: Lack of broadband and other technical innovations
Economic: Lower costs for broadband, hardware and software; new economic models built around free content for recovering costs.	Economic: Lack of resources to invest in broadband, hardware and software. Difficulties to cover costs for developing OER or sustaining an OER project in the long run.
Social: Increased use of broadband, the desire for interactivity, increased skills and willingness to share, contribute and create online communities.	Social: Absence of technical skills, unwillingness to share or use resources produced by someone else.
Legal: New licensing regimes facilitating sharing of free content.	Legal: Prohibition to use copyrighted materials without consent

Source: OECD, *Giving Knowledge for Free. The Emergence of Open Educational Resources*, OECD Publishing House, 2007, Part of Table 4.1, p.70

E. The UP Open University and the Inhibitors

Plotted against the inhibitors above, how does the UP Open University fare? The table below assesses:

Inhibitor	Situation in UPOU
Technical: Lack of broadband and other technical innovations	Not a problem, though intermittent downtime occurs because the relatively small bandwidth of the broadband and other interconnectivity innovations
Economic: Lack of resources to	Not much of a problem although the UPOU suffers

invest in broadband, hardware and software. Difficulties to cover costs for developing OER or sustaining an OER project in the long run.	from lack of financial resources, being dependent on the appropriations from the UP system and the national government, as it is a national public university. Investments in interconnectivity, hardware and software have to be reviewed as the system in place may not be up to date or adequate to meet present and future requirements and demands. Developing OER still suffers from lack of policy directions or approval from upper management though national policies encourage the use of open sources like Linux and Moodle. The UPOU uses these open management systems in the teaching and managing of its online courses/programs.
Social: Absence of technical skills, unwillingness to share or use resources produced by someone else.	Technical skills are present. However, there may be a general (though unsubstantiated) unwillingness or reluctance to share or use resources produced by others
Legal: Prohibition to use copyrighted materials without consent	This is the main problem

The UP Open University appears open to the idea of open access and open educational resources. Its cyber infrastructure appears poised to host OERs. It has technical competence; it has resources to share. It has been using free and open software like Linux and Moodle for its teaching and learning management e-portals and virtual classrooms. It has adopted the resource based course development approach (RBC) in using multiple materials in various formats to enrich its course management by referring or directing its community of learners to relevant on and offline free materials available in the Web and other sources of free information. Its faculty members have been open to posting in their social networking sites and even in the UPOU websites, works in progress and other creative works and researches so far completed.

National policies encourage the use of open resources, open software, open content. Government agencies' outputs are considered owned by the public and therefore in the public/common domain. However, in the absence of clearer policy directions from the UP System on whether to go open or not, and with the existing University policies on intellectual property rights (IPR) and use of copyrighted materials, the UPOU is constraint to go full blast in providing open access and OERs.

The University's policies on IPR hinge on "... a need to protect the intellectual property rights of UP because it is an academic institution and a research university with a large pool of intellectual and creative resources. UP produces inventions and

technologies which may serve the public good with outputs not unduly influenced by current government administration and other commercial private interests.” (Sarhou, 2010).

Copyright or the exclusive and legally secured right to the matter and form of literary, scholarly, scientific and artistic works resulting from intellectual creation, as provided for under the IP Code of the Philippines (Chapter V, Sec. 177), is respected. In addition, “...works covered by copyright like all literary, artistic, and derivative works , including *course materials for e-learning and distance education*, shall also be covered by the UP IPR Policy on Copyright...” (Governing Principles and Policies on IPR of the University of the Philippines System, 2003, emphasis mine).

Copyright law provides that one cannot reproduce, copy or communicate/transmit to the public copyright material (literary, dramatic, musical and artistic works, films and sound recordings) without the permission of the copyright owner. In short, the default rule is that all uses not expressly permitted by the copyright holder are prohibited (Fitzgerald et al., 2006).

F. OER Future in UPOU

Ideally, open educational resources are considered as another service that the public simply expects of every institution of higher education, and that each institution will find the will and the resource within itself to engage in OER. However, reality tells us that this is something still to be aspired for in UPOU.

There are indications that its adoption at UPOU has been readily barred by legal impediments on IPR which erased most of the gains in technology, economics, and social fronts above. But nothing is impossible. Continuous debates on this legal barrier have to be done in order to convince the legal minds and policy makers that sharing knowledge and contributing to democratic governance in this digital age is more important than claiming IPRs for oneself.

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