Special Issue – Open Educational Resources: Opening Access to Knowledge

Editorial – Volume 14, Issue Number 2

Rory McGreal[1], **Wanjira Kinuthia**[2], and **Stewart Marshall**[3]
[1]Athabasca University, Canada, [2]Georgia State University, USA, [3]The University of the West Indies Open Campus, Barbados

This issue is made up of contributions to the OER Knowledge Cloud by authors working in three of the world's leading open universities, namely the OU UK, Athabasca University, and the Dutch Open University, as well as other researchers working in the OER field. The articles begin with a case study of an OER implementation followed by a rationale for using OER on mobile learning and a description of developing content for use on mobile devices. Other articles explore the longterm sustainability of OER and their disruptive influence on traditional institutions, as well as the need for national policies and their use in other languages. In the final article, the author looks at visualisation and mapping of OER and their use.

Supporting the widespread availability of OER is a goal that Athabasca University (AU) has embraced through association with the Commonwealth of Learning and by becoming a charter member of the OER University. The article by Ives and Pringle, "Moving to Open Educational Resources at Athabasca University : A Case Study," reviews what OER are, who creates them, how they are paid for, how they are distributed, and how staff and faculty members at AU work with them. This article also describes the context within which AU provides teaching and learning services, including the challenges and opportunities that have led it to consider moving to OER. It outlines the design theory and instructional principles underpinning completed OER projects, with a brief illustration using two examples. The article concludes with a description of the current plan and expected next steps towards including OER in large numbers of AU online courses.

In the following article, Mohamed Ally and Mohammed Samaka focus on the link between OER and mobile learning. They recognize that these new devices and increased access to quality content will cause significant shifts in the way education is designed, delivered, assessed, and accredited, even suggesting that future learners may bypass formal education providers. They are proponents of student created content as open access. They note that quality must be assessed not only in terms of the content and the pedagogy, but also in terms of the appropriateness for diffusion on mobile devices accessible to learners over the Internet.

Content development tools can improve the adoption of OER for content creation and subsequent reuse. Kinshuk and Ryan's article "Mobile Authoring of Open Educational Resources as Reusable Learning Objects" introduces an authoring tool for creating learning objects and activities in mobile contexts. This implementation demonstrates in-situ capturing of location-aware multimedia examples representing authentic learning situations. The platform enables learners and instructional designers to capture authentic, real-life learning scenarios using integrated mobile device sensors, whenever and wherever they occur. Captured authentic learning examples can be utilized within learning activities, and the learning activities are encapsulated within a learning design. To enable content reuse in other contexts, metadata are collected, and IMS open content standards are used for exporting it. The content is automatically and freely published in a repository and reused in various learning management systems, learning design players, as well as other standardized OER editing and authoring tools.

Developing and sharing OER have great potential to enable people in developed and developing economies to transform their talents into professional competences. Yet, due to the economic crisis and changes in governments, funds for the development of OER are scarce, making it important to think about the sustainability of OER in terms of financial sustainability. This does not necessarily mean that an OER-organization has to generate a competitive return on investment in financial terms for the providers, but an OER business model can help to maximize the supply and maintenance of OER, and to ensure sustainability. In his article "Strategies for Sustainable Business Models for Open Educational Resources" DeLangen provides an overview of possible business models in terms of a Business Canvas. Then, moving on towards more complex *value networks*, DeLangen proposes that an OER-business model should involve both a network approach and a reversal of the concepts of the consumer and the stakeholder as used in regular business analysis.

The article "Government Support for Open Educational Resources : Policy, Funding, and Strategies" by Stacey argues that whilst grants from foundations (such as Hewlett, Mellon, and Gates) played a critical early role in establishing the field of OER, these solutions are not long-term and cannot be relied on for sustaining ongoing operations or generating widespread adoption. In order to sustain ongoing operations and development, government support and funding is required. This article examines the role government policy and public funding is playing in the OER field and the strategies

and practices public funders are using, including taking over from the early stage funding that foundations provided.

The evolution from paper to online production and consumption of instructional materials is a disruptive technology in which much lower cost and increased accessibility of online work opens the product to a completely new group of potential users. The scholarly and professional discourse related to OER has largely focused on open learning objects, courseware, and textbooks. However, especially in graduate education, articles published in scholarly journals are often a major component of the course content in formal education. Further, open access journal articles are critical to expanding access to knowledge by scholars in the developing world and to fostering citizen science, by which everyone has access to the most current academic information and research results. In the article "Open Access Scholarly Publications as OER" Anderson presents the rationale, common practices, challenges, and personal anecdotes from a journal editor on the production, use, and reuse of peer-reviewed scholarly articles as OER. Anderson also highlights some of the challenges, economic models, and evidence for quality of open access journal content and looks at new affordances provided by the Net for enhanced functionality, access, and distribution.

It can be argued that making OER sustainable cannot be left to the educational institutions, but should be facilitated in a national setting, by means of a national OER policy or strategy. Many countries (for example, Brazil, China, India, Indonesia, Japan, Korea, Poland, South Africa, The Netherlands, Turkey, UK, Vietnam) have introduced specific measures and subsidies in order to stimulate the production and use of OER. Some of these countries are considering a national OER approach. In such circumstances, a significant intervention with OER in the educational system will need to facilitate improvement in accessibility, quality, and efficiency at no extra cost. In the article "The LOGIC of National Policies and Strategies for Open Educational Resources" Mulder pays special attention to the Dutch Wikiwijs Program as an example of an intervention with a far-reaching scope.

OER in other languages besides English are growing in popularity. In his paper, Cobo analyses several other languages and focuses on "the language gap". He examines large databases and discusses the increasing relevance of technology in opening access and reports on some of the challenges for OER production and dissemination in other languages. These include not only the linguistic but also the cultural barriers that exist when OER are implemented.

The affordances of hypertext mark-up languages and the Internet coupled with the range of potential OER assets available means that visualization mapping approaches are useful and often necessary in both the design and development of OER. They are particularly helpful in understanding how to navigate and use OER once they are published. In "Visualization Mapping Approaches for Developing and Understanding OER" Connolly examines how a variety of visualization mapping methods have been

used: at a strategic macro level in terms of OER institutional planning, at the meso level concentrating on the design and production of OER materials, and at the micro level as a navigating interface to OER assets. In addition, they enable learners and researchers to make sense of published OER materials. Most examples in this article are drawn from the OpenLearn OER project with some other illustrations, for context, from other OER projects.

We'll end this editorial with a sincere thanks to all those who make IRRODL possible: first to our sponsors Athabasca University and the Social Sciences and Humanities Research Council of Canada (SSHRC) then to our authors, reviewers, subscribers, and readers.

Athabasca University