# Overview of Open Educational Resources Policies in Canadian Institutions and Governments

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# Introduction

This paper reports on the status of Open Educational Resources (OER) policies in Canadian government and higher education institutions, consisting of a <u>POERUP</u> (Policies for OER Uptake) country report on the existence of policy documents designed to support OER in the different provinces and their institutions. With the knowledge that there are not yet any governmental policies to support OER, open textbooks and few related activities in Canada, this report describes initiatives and/or policy statements that are currently being considered – or perhaps even in developmental stages – in higher education institutions and government.

Although it was anticipated that there might be some direct and observable evidence of OER policies, apart from emerging trends related to open access/open data initiatives, with few exceptions, there are no signs of any significant OER-related activity across Canadian governments, institutions or industry. The quest to determine how and where OER were being created, assembled, used and repurposed – and if there were accompanying policy statements – proved to be insufficient; the collection of data necessary to provide a fuller and more accurate picture of what is happening in Canada has to be related to what is occurring with respect to open educational practices (OEP) themselves. OEP refers to "the range of practices around the creation, use and management of open educational resources with the intent to improve quality and innovate education" (OPAL, p. 4, 2011). The questions asked of all respondents and their answers were therefore critical to provide an indication of Canada's level of openness and strategies not limited to OER, but to also include OEP.

This stance is supported by Ehler (2010) who found that "many current OER initiatives focus overwhelmingly on access and availability of Open Education Resources ... and not enough on helping individuals and organizations to develop Open Educational Practices ..." (as cited in Opal, 2011, n.d.). Although it was expected at the start (and ultimately confirmed) that there are few significant OER initiatives taking place in Canada, those that exist do indeed focus on access and availability issues as opposed to development of practice and policy and/or initiatives to encourage use and re-use. This state of affairs was further complicated by respondents' comments, supported by UNESCO/Commonwealth of Learning (COL) research and literature, that OER creation, licensing, costs, business models, etc. are neither widely known nor well understood, "especially by policy makers and institutional managers."

These factors, and the degree of confusion surrounding terminology related to open educational resources, open source, open access, openness and accessibility – and the relationship between each to OER – influenced a shift in the focus of this paper, therefore, to describe only in general terms the Canadian landscape of OER policy and instead review in more specific terms Canadian activities and events related to OEP.

# Methodology

Three primary points of contact were initially identified: <u>Athabasca University</u> (AU); <u>BCcampus</u>; and the Ontario College of Art and Design University or <u>OCAD University</u> (OCAD U).

Including these three initial contacts, a total of 93 stakeholders (government, public institutions and private companies) were contacted. Of these, 21 responded in a substantive manner. Academic, government and private sector representatives were sent a standard email, which explained that the definition of an OER is broad and sometimes subject to misinterpretation. Definitions were therefore summarized from Tony Bates' (2011) paper, "Open Educational Resources (OER) Opportunities for Ontario," as listed:

...the open provision of educational resources enabled by information and communication technologies, for consultation, use, and adaptation by a community of users for non-commercial purposes. (UNESCO, 2002)

...teaching, learning and research resources that reside in the public domain or have been released under an intellectual property licence that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials or techniques used to support access to knowledge. (William and Flora Hewitt Foundation, 2008)

...digitised materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research. (Hylén, J., 2006)

# Respondents were then asked:

- 1. What major OER initiatives are you involved with? Are you collaborating with any other institutions in OER initiatives?
- 2. Are there any policy documents that your organization has drafted to facilitate use, creation and adoption of OER?
- 3. Are formal policy documents or initiatives at institutional or government level important for OER adoption?
- 4. What do you see as the major barriers and incentives for OER production and use within your organization and partner organizations?
- 5. Are you aware of any other significant OER initiatives in Canada?

Besides responding to the questions above, several email respondents agreed to participate in telephone interviews; insights from these conversations have been incorporated into final findings. Information provided in this report has also been accessed through Internet research reaching international OER leaders and stakeholders.

# **OER, Open Access and Openness**

Wikipedia <u>describes open access</u> as "the practice of providing unrestricted access via the Internet to peer-reviewed scholarly journal articles." While open access is very much related

to open educational resources (Butcher, 2011), the two are not equal or identical. Open access material is not the same as openly licensed material and does not necessarily allow for the reuse, remixing and redistribution that is typical of OER material. They are different, but complementary, features of the open education movement.

The term "open education" provides the framework for numerous other pursuits associated with openness such as "content, access to instructors, learner support, ... recognition of prior learning, shared resources" (Bates, 2012). Attempts to distinguish between OER, open access and openness, and to define how they can be or are successfully applied in Canadian practice, can pose a challenge.

One example of how these concepts can be successfully married, however, is provided by OCAD U, whose <u>Inclusive Design Research Centre</u> (IDRC) is immersed in a <u>Flexible</u> <u>Learning for Open Education</u> (FLOE) project dependent upon the qualities of OER and OER repositories to provide integrated and sustainable approaches to accessible and open learning, and whose primary strategies are very much co-dependent on OER.

Notwithstanding, when questioned about their use of OER, most respondents to this survey answered by describing their open access policy and practices but were unable to speak specifically to the topic of OER or describe the difference between the two concepts. For example, Katherine McColgan, Coordinator at the <u>Canadian Association of Research Libraries</u> (CARL) stated that most of their members have institutional repositories which make research and data available and sharable, but admitted that while they have adopted an open access stance, the meaning of OER itself was vague to her (K. McColgan, K., personal communication, April 16, 2012).

A conversation with Frits Pannekoek, President of Athabasca University, helped reveal some of the OER/OEP issues and challenges in Canada: first and foremost, the problems of definition and purpose. Admitting that anything (image, audio clip, textbook, article, etc.) can be an OER, Pannekoek suggested that, for many, the move to develop and establish higher level government policy, standards and protocols on OER often relates more to open access than it does to the creation, use, reuse and sharing of learning objects (Pannekoek, F. Personal communication. April 26, 2012). These sentiments are echoed in the findings of the 2011 UNESCO Survey on Governments' Open Educational Resources (OER) Policies which concluded overall "few explicit OER policies exist and there appears to be some confusion regarding an understanding of the concept and potential of OER. Many projects are geared to allowing online access to digitised educational content, but the materials themselves do not appear to be explicitly stated as OER" (UNESCO, 2012, p. 25).

The confusion between OER and open access is not difficult to understand, particularly as there are variations and themes of openness and open access, which create a relationship of co-dependency between OER and its many elements. Events and activities taking place at OCAD U-IDRC, for instance, where researchers are dependent upon OER for their work on inclusiveness and accessibility are evidence of this diversity. The difficulty in determining where one element leaves off and the other begins and where each falls on the spectrum between OER and openness, therefore, was evident in many respondents' struggles to provide definitive answers related to how they are working with policy and practice related to OER.

The need to connect OER and OEP is essential to create a full picture of the activities informing policy and practice in Canada. In this regard, Paul Stacey (formerly at BCcampus)

of <u>Creative Commons</u> – a non-profit organization that "enables the sharing and use of creativity and knowledge through free legal tools," – has worked intensively on what he terms the Creative Commons opportunity and has developed a map of what he views as "the opportunity sectors which are undergoing change through use of open licences" and the activity and new public/business models emerging across:

- open educational resources;
- open access;
- open user generated creative works;
- open data;
- open GLAM (Galleries, Libraries, Archives and Museums);
- open government;
- open policies, practices and guidelines;
- open licences;
- open licence tools (i.e., Creative Commons), embedding them in authoring and search engine platforms; and
- open standards; and
- open source software.

(Stacey, 2012)

Stacey (2012) reflects on the impact of openness, suggesting there is indeed "a lot of open" and many opportunities to work in an open environment whose full potential has not been tapped. It is notable that although OER is at the top of Stacey's list, it is nonetheless only one in a group of elements related to OEP.

The impact of openness in Canada is therefore perhaps not yet completely understood. Tony Bates', in his "predictions for higher education" lists the integration of social media into formal learning as the fifth of his ten growing trends in online learning (Bates, 2012). The concept of developing openness and accessibility in this format adds dimension to Stacey's reflection on how the use and impact of openness – and correspondingly, OER/OEP – may have only just begun.

Bates uses the example of the University of British Columbia's <u>wiki</u> infrastructure to emphasize the incorporation of openness in formal education, and claims this will only grow because:

- once the infrastructure is in place...it is easy for faculty and students alike to create their own materials:
- campus wide log-in provides security and quality control so that content cannot be tampered with externally, but allows for open access to other faculty and authorized users from outside the institution;
- interaction between students and instructors and assessment remains private (within the LMS);
- such sites gradually build centres of excellence around academic topics especially interdisciplinary areas;
- topics can be developed as 'stand-alone' wikis that transcend a course, or as course related topics, reducing over time the need to create online course materials from scratch; and

 because these are open access materials, under a Creative Commons licence, materials can be accessed from a growing number of institutions worldwide as well as creating local sites.

(Bates, 2012)

And, although the Canadian government's promotion of open access to all ended in March, 2012 with the termination of its 17-year-old Community Access Program (CAP), providing access to computers and the Internet to citizens in communities across the country, there is a federal program underway to promote the growth of the open data movement through the introduction to businesses and citizens of an <u>open data pilot project</u> with three streams: open data, open information and open dialogue.

The anticipated benefits of this pilot project include:

- support for innovation;
- leveraging public sector information to develop consumer and commercial products;
- better use of existing investment in broadband and community information infrastructure;
- support for research; and
- support for informed decisions for consumers.

(Government of Canada Open Data Portal, 2011)

While it is not possible in this report to produce correlations between the Government of Canada pilot project and the migration of universities toward open access, it is clear that many Canadian institutions (e. g., Athabasca University, University of Ottawa, University of Calgary, University of Toronto, Concordia University, Memorial University) are familiar and comfortable with the concept of open access and are actively sharing scholarly research and data through university repositories, author funding to assist researchers minimize or avoid open access fees levied by publishers, support for open university presses such as <a href="https://doi.org/10.1007/nn.nd/">Athabasca University Press</a> (AUPress) and limited titles from University of Ottawa Press, and participation in the development of the Canadian Creative Commons licence (now relaunched to support Canadian CC activities).

The concept and activities of openness are clearly evident in the many Canadian universities and community colleges developing programs and policies to broaden open access and designing, developing and building learning object repositories (e. g., Athabasca University, Memorial University, Concordia University, University of Calgary, etc.).

Of these, Athabasca University – sometimes referred to as Canada's "<u>First OER University</u>" – was the first Canadian institution to adopt an open access policy in 2006, which states

... that faculty, academic and professional staff deposit an electronic copy of any published research articles (as elsewhere accepted for publication) in an AU repository. The contract with the publisher determines whether the article is restricted (lives in the repository as a record of the AU's research but is not accessible online by searchers) or open access (accessible online by searchers).

In 2009, The University of Ottawa adopted "<u>a comprehensive open access program that supports free and unrestricted access to scholarly research</u>." Some of the initiatives in its open access program include a promise to make accessible for free, through an online repository,

all its scholarly publications; an author fund designed to minimize open access fees charged by publishers; funding for the creation of digital educational materials accessible by all online, for free; and commitment to publish a collection of open access books and research funds to continue studies on open access.

Other universities are following suit. University of Toronto/OISE, for instance, adopted a formal policy on open access in March 2012, referencing the <a href="Open Data Pilot">Open Data Pilot</a> (Government of Canada initiative).

Nonetheless, while the concepts of openness and open access appear to be gaining considerable ground, and in spite of the apparent endorsement by government, their growth – similar to that of OER – is threatened by lack of public funding. Michael Geist, Canada Research Chair (CRC) in Internet and E-commerce Law, says:

Despite the mounting support for open access, Canada has lagged behind with only a handful of pilot projects from the federally-funded research agencies that receive hundreds of millions of dollars every year in taxpayer support. With the new open access goals, it is time for those agencies to make a firm commitment to open access.

(Geist, 2012)

And, while openness can be seen as a growing trend, specific or detailed OER initiatives, in many sectors, are difficult to isolate. Only a handful of Canadian institutions are visibly working on OER practices and/or policy development. Stacey and Rominger (2006) suggested that "despite the wish for one pure model of OER, a rich array of OER of various flavours are springing up around the world" (p.2). This underscores the challenges respondents had answering questions directly related to how they are working with OER when the term and many activities associated with it remain difficult to define.

With acknowledgement of the many misconceptions surrounding OER, this paper describes how Canada, while not a prominent figure on the international map of OER, does have projects and initiatives in progress and is engaged in real and thriving open educational practices.

# **Major Canadian Initiatives and Collaborative Partnerships**

# **Creative Commons Canada**

Born from the global open education movement, the creation and use of OER benefits from the development and use of Creative Commons licences, which provide the legal framework to share these resources. A non-profit organization, Creative Commons "develops, supports, and stewards legal and technical infrastructure that maximizes digital creativity, sharing, and innovation." It has created a set of free licensing tools permitting authors/developers to share, reuse, and remix materials (including, but limited to OER) with an explicit "some rights reserved", but others clearly allowed, approach to copyright.

As an affiliate of this larger body, Creative Commons Canada (CC Canada) is a collaborative initiative comprising the <a href="Samuelson Glushko Canadian Internet Policy and Public Interest Clinic (CIPPIC)">Samuelson Glushko Canadian Internet Policy and Public Interest Clinic (CIPPIC)</a>, BCcampus and AU. Working with members of artistic, education, government, private business, cultural, scientific and technological groups, CC Canada aims to

advance the mission of goals of Creative Commons and communities it supports and enables, through the advancement of public education and outreach about CC licenses, tools, technology and programs, among other things, for the purpose of cultivating a cultural commons of shared intellectual, scientific, educational and creative content.

(CC Canada, 2012)

In addition to helping users choose licences and find cc-licensed work, CC Canada is a proponent of open government and the philosophy that government data should be accessible, shareable and re-usable under open licences by everyone. It is actively involved in this pursuit, studying how CC licences can be used by governments to make data available freely for public use.

Another CC Canada project is being spearheaded by its legal team at CIPPIC, which is researching the development of user-friendly tools that will provide comprehensive knowledge to users on how to analyze and use different open licenses. CC Canada has also launched a series of conferences (salons) country-wide to raise awareness of CC and its potential among different constituencies including educators, writers and artists.

# **Athabasca University**

There is significant OER/OEP activity at AU. AU was the first university in Canada to join the OpenCourseware Consortium (OCWCC), and as of late 2012, was still the only Canadian member. AU has made available courses and course modules including multimedia objects at the AU OCW site licensed for use, generally with a Creative Commons Attribution licence. The materials contained in this site are open and free of charge for anyone to use.

AU is home to the <u>Technology Enhanced Knowledge Research Institute (TEKRI)</u>, and the <u>UNESCO/Commonwealth of Learning Chair in OER</u>, which promotes the use of OER at the institutional, national and international levels. The Chair is a member of the board of the international <u>OER Foundation</u>, which hosts the <u>OER university</u> (OER u), an international consortium of universities, community colleges and other organizations supporting pathways to accreditation using OER. Athabasca University is a founding partner in the OER u and a partner in the re-launch of Creative Commons Canada described above.

AU is particularly well-suited for participation in the assessment and accreditation of informal learners, as is the goal of the OER u initiative. The Prior Learning Assessment and Recognition (PLAR) program at AU has been a feature of this open university for many years through the Centre for Learning Accreditation. Through PLAR, the university awards credit towards a degree or certificate based on the recognition of learning acquired through life experience, job training, workshops, seminars or other experience. AU also has a well-established Challenge for Credit policy that allows people to demonstrate that they are proficient in the subject matter of a specific course, without having to take that course. Credit is given based on a challenger's knowledge of the course content and the payment of a testing fee.. Transfer credits from other universities across Canada, the USA, and internationally are readily recognizable at AU. And, it is the only Canadian university that has US accreditation (through the Middle States Commission on Higher Education) and so AU credits are likewise recognized across North America and internationally.

With respect to actual policy-making, AU has drafted an OER policy slated for release in 2013. It is presently being reviewed through consultations with the AU community and a

strategy for integration with course development is being established. (A policy on intellectual property is also being developed and is scheduled for release in 2013).

As previously mentioned, AU policy on open access <u>already exists</u>, and emphasizes the belief that access to information and knowledge defines both the classical and modern university; to this end, it encourages making results of research accessible to everyone and has made a public commitment to Open Access research publishing. This started with the AU library in 2005, with the implementation of <u>AUSpace</u>, a DSpace repository of scholarly articles, theses and other documents produced in the AU community.

In addition, AUPress at AU was the first open access university press in Canada. It publishes all titles under open access licence and in multiple formats including print (at a cost) and PDF (no cost). In a research paper comparing AUPress sales using data from Amazon, the print book sales of AU Press compared favourably with sales of other university presses in Canada (McGreal, Shen, McNamara, 2012).

In addition, the <u>Athabasca University Graduate Student Association</u> (AUGSA) has developed two policies it is proposing to government around open access. A draft document, designed for provincial government action, asks for the introduction of policies to deliver publicly funded research findings back to the public in Open Access publication formats, as well as legislation for the integration of OA with authors, institutions and other funding agencies.

A second draft policy to the federal government includes requests for the three federal research funding councils (SSHRC, NSERC, CIHR) to adopt a policy to ensure that all findings produced with publicly funded research are made available in Open Access formats; calls upon individual researchers to publish in Open Access journals and/or deposit their peer-reviewed manuscripts in Open Access repositories; requests academic institutions to adopt policies that mandate researchers to publish all their post-refereed manuscripts in an Open Access format; and supports the creation, maintenance, archival, promotion, standardization and interoperability of Open Access repositories at the institutional and national agency level.

In addition, the AUGSA report <u>Canada's Contribution to the Commons</u> makes several recommendations to administration and faculty in support of OER. These include adopting open practices, incentivizing OER, open access publishing, and using open textbooks (Coffin, 2012).

Editors from AU's scholarly journal, the <u>International Review of Research in Open and Distance Learning</u> (IRRODL), were instrumental (through appeals and lobbying) for the SSHRC aide to scholarly publication program to reverse itself from discriminatory funding prohibiting funding for OA journals to the current policy that supports not only OA journals, and now <u>promotes open access</u> more widely.

The AU Centre for Learning Design and Development (CLDD) staff are building an inventory of existing OER produced and used in AU courses. Training for faculty and staff in the identification, evaluation, selection and adaptation of OER for adoption as learning resources in courses is currently being implemented, and there is an extensive list of OER/OEP activities undertaken and underway for internal and external audiences, including, but not limited to:

• Development of an OER repository and database;

- OER research;
- A mapping exercise of international activity related to OER;
- Open education/open access activities (presentations, workshops, conferences, etc.);
- the OER Knowledge Cloud;
- the OER Global Graduate Network:
- OER awareness survey (internal);
- OER u courses, e-texts and AU press book on OER;
- OER evaluation (development of a matrix to assist internal staff to evaluate OER);
   and
- Open Education MOOC.

AU researchers/course designers developed an OER in <u>English Second Language Grammar</u> for use on mobile devices as early as 2006 and has also adapted and delivered its first online graduate course adapted and developed entirely from an existing Australian OER in Green Computing. In addition, AU has delivered MOOCs (Massive Open Online Courses) on Change and Open Education. These were made available freely online.

Finally, AU President, Frits Pannekoek is working on the idea and development of "The Best First Year Online" – an OER option that:

would consist of a digital repository of the world's best courses for a generic first-year university program....The courses would all be made available online – fully accessible, totally free, completely adaptable, always changing and, to ensure intellectual excellence, peer reviewed. They would represent the best pedagogy in combination with the best available content

(Pannekoek, n.d., p. 6)

#### **Government of Alberta**

Alberta, without making direct commitments has been actively supporting OER initiatives for several years. In 1999, the Campus Alberta Repository of Educational Objects (CAREO) was funded to promote the sharing of open learning resources within Alberta. In 2007, the Alberta Rural Development Network was funded for a project called Blaze to work with the Canadian Virtual College Consortium, to test the feasibility of using Flintbox for the dissemination of OER, particularly to developing countries. Unfortunately, these initiatives were not funded after the initial investment and eventually were closed. Another limited project that is still extant is the Alberta Core (Collaborative Online Resource Environment) and the LearnAlberta. Ca site at the K-12 level. These are limited quasi-open initiatives, restricting the openness on some resources to provincial or institutional teachers similar to the BCcampus so-called BC Commons licence (See below.)

Through its Access to the Future Program, the Alberta Department of Enterprise and Advanced Education has been financially supporting OER initiatives at Athabasca University. These include a project to promote OER within the university and search out and identify reusable objects for courses and support for the AU <u>UNESCO/COL Chair in OER</u>, which is charged with promoting the use of OER institutionally, provincially and internationally.

# **BCcampus**

BCcampus, arguably the most active collaborative Canadian organization in the OER arena, is a publicly funded service which has turned to open concepts and methods to create a sustainable approach to online learning for BC public post-secondary institutions.

Founding director, David Porter (n.d.) <u>wrote</u> that BCcampus was created to enhance students' ability to not only identify, choose, register for and take courses but also to apply any academic credits earned against credentials from a selected home institution...(it) was also intended to benefit institutions through the rationalization of demand for academic opportunities from students with the supply of online courses from BC public post-secondary institutions.

A participant in the OER u initiative, BCcampus is a leading proponent of OER. It has been operating a provincially limited "open" initiative since 2003. Supported by annual Ministry of Advanced Education government funding for a cumulative total to 2012 of \$9.5million, BCcampus projects produce online lessons that are available for free sharing and reuse among educators within the provincial post-secondary system.

BCcampus is currently at work to develop and establish higher level government policy for OER, drafted in alignment with the Government of BC "open government" policy. The BCcampus OER initiative has produced <u>extensive documentation</u> (including calls for proposals, summary of outcomes, and analysis of results) around the use, creation and adoption of OER. In addition, it is currently providing OER program and policy advice to <u>eCampus Alberta</u> for its Online Course Development Fund and to <u>Contact North</u> for potential use in the yet to be launched <u>Ontario Online Institute</u> (P. Stacey, personal communication, April 18, 2012).

All BC public post-secondary institutions participate in the BCcampus OER initiative. A feature of the grants for course development through the Online Program Development Fund (OPDF) is that extensive inter-institutional collaboration is required. The vast majority of development is done collaboratively, involving two or more institutions. While BC post-secondary institutions are the lead developers for all OPDF initiatives, many projects have outside partners including associations, non-profit groups, societies, school districts, First Nation groups, federal government agencies, private sector companies, and higher education institutions outside of BC. The contributions of these partners are significant and their participation broadens the reach and benefits of OPDF development activities across sectors and beyond.

As projects complete their development cycle, they are licensed for sharing and uploaded to the BCcampus Shareable Online Learning Resources repository (SOL\*R), which enables the licensing, contribution, and access to free online teaching and learning resources. SOL\*R adheres to the OER principles of sharing, discovery, reuse and remixing of learning objects (from individual activities to full courses) from a variety of disciplines and subject areas. SOL\*R also has a search engine that enables one to search for resources by field of study, subject area, contributing institution and other attributes. (Stacey, P., personal communication, April 13, 2012).

The OPDF provides developers with the option to license their work under the global terms of a Creative Commons licence or, in what might be seen as a strategic move to promote OER/OEP, to use a BC Commons licence which restricts sharing to a local environment (the BC public post-secondary system) and audience (post-secondary faculty and staff only). This, according to Stacey (2006), "provides developers with an opportunity to experience sustainable development benefits through sharing on a local level, amongst peers, before considering the larger global context." More than 90% of the OPDF developers have taken this BC-only route. Stacey contends that this provincially-confined openness step has reduced fears that the sharing and reuse of one's material comes with a loss of control over authorship, while promoting critical knowledge of how open licences work in relation to copyright in a sheltered BC environment. However, as these fears recede, Stacey contends that there will be more use of national and international Creative Commons type licences. On the other hand, it could be seen by others as an unnecessary concession to recalcitrant faculty.

BCcampus has been operating its initiative through the annual BCcampus OPDF since its conception in 2003. It follows from previous Canadian course development programmes initiated by Contact North and TeleEducation NB in the 1990s (Anderson, 1991, McGreal, 2000). The BC OPDF achievements include the creation of more than 350 courses and nearly 400 course components leading to 47 credentials, although less than 10% of these are openly licensed, most being under the BC Commons licence and restricted for use only by BC post-secondary institutions. Interestingly, Athabasca University has been recognized officially as a BC documented university, and so also has access to these BC only materials.

Specifically in support of OER, other BCcampus initiatives are underway. This includes the major open textbook initiative announced by the BC Ministry of Advanced Education, Innovation and Technology. Another initiative is the implementation of an OER initiative around apprenticeships for the trades in partnership with BC's <u>Industry Training Authority</u>. BCCampus is also working with the <u>North American Network of Science Labs Online</u> (NANSLO), building on the success of the <u>Remote Web-based Science Laboratory</u> (RWSL) and open educational science courseware previously developed by BCcampus.

BCcampus hosted a <u>working forum on OER</u> for senior post-secondary institution representatives in Vancouver in October, 2012 with the objective of developing a common understanding of what OER could mean for BC and building a shared vision of how to develop and use them. The session also studied ways BC can take advantage of the promise of OER and specifically, open textbooks. This coincided with the announcement by the Ministry of Advanced Education, Innovation and Technology that they will collaborate with post-secondary institutions in implementing an open textbook policy in anticipation of their use in B.C. institutions as early as 2013-14, supporting students taking the 40 popular post-secondary courses (BC Ministry, 2012). The development of this open textbook initiative is scheduled to take place with input from B.C. faculty, institutions and publishers through an open Request for Proposal process co-ordinated by BCcampus.

#### The forum was heralded as

an opportunity to put on the table real action plans for institutions, heads of teaching and learning centres, VP's/Presidents, and government. Action can be small or big, policy or practice, cost or no-cost. Action can be something an institution pursues autonomously or done in collaboration with others across

the BC system and globally. This event provides us with the opportunity to move BC forward so hearing action plan recommendations will be very helpful for the Ministry, for institutions and for BCcampus.

(Stacey, 2012)

#### **Government of British Columbia**

The BC Campus forum was called to discuss OER because of the B.C. Ministry of Advanced Education, Innovation & Technology announcement previously mentioned, in which it made a <u>public commitment</u> to OER, working with BCcampus. Ian Rongve, BC Assistant Deputy Minister, Advanced Education (AVED), wrote that "BCcampus is prominent in the open education movement and AVED's sponsorship of the BCcampus initiative demonstrates a proactive approach to supporting education and training initiatives that promote the use and reuse of open resources" (Rongve, personal communication, May 16, 2012). He also directly referenced the government's acknowledgement of open educational practices and confirms its support and funding of openly licensed education. Although Rongve did not confirm the exact status of OER policy development, he noted "discussions regarding open licensing of educational materials are ongoing . . . ." The Ministry has a history of involvement in open education in British Columbia, and continues "to explore new options and opportunities in this evolving domain of practice" (Rongve, ibid).

#### **OCAD U Inclusive Design Research Centre (OCAD-IDRC)**

IDRC, a research and development centre at OCAD U in Ontario, consists of an international community of open source software developers, designers, researchers, advocates and volunteers working collaboratively to ensure that emerging information technology and practices are designed inclusively. Based on a philosophy of sharing and supporting open standards, open access and open source, the IDRC distributes it work as broadly as possible to encourage participation in its initiatives. The learning technologies and products that have been developed and distributed by IDRC are distributed under the <a href="Month General Public License">GNU General Public License</a> meaning that the code is open source and requires users to share product on the same liberal licensing that they have acquired it.

A key project, <u>FLOE</u> (Flexible Learning for Open Education) is one of the Centre's biggest initiatives. It has received substantial funding from the Hewlett Foundation and the European Commission. FLOE takes advantage of the fact they have a set of curricula that is openly licensed that can be repurposed and reused to make content accessible. Jutta Treviranus, Director of the IDRC, recognizes that the FLOE strategy is very much co-dependent on OER (J. Treviranus, personal communication, October 6, 2012).

In the <u>public description</u> of the FLOE project, Treviranus (Ontario College of Art & Design, 2010) wrote that the work being done demonstrates how OER presents an optimal learning environment to meet the needs of all learners, including those with disabilities. Supporting the OER community in providing a sustainable, integrated approach to accessible learning and addressing the needs of learners who currently face barriers, FLOE advances the strengths and values of open education and encourages pedagogical and technical innovation. FLOE also promotes content portability, ease of updating, internationalization and localization, content reuse and repurposing, and more efficient and effective content discovery.

FLOE's work is international and broad: to support adoption in Africa and other areas where mobile devices are more prevalent than internet access, FLOE is acting to create critical tools and services for delivery of OER via audio-only, text messages and the small screens found on popular cell phones. These same tools and services are intended to support accessibility, adding a compelling motivation for OER adoption of inclusive design.

# FLOE's goals include:

- development of an engaging outreach and awareness program for both the OER community and the accessibility community to encourage collaboration in meeting diverse learner needs;
- enabling learners to identify their specific learning needs;
- supporting OER producers to create and label transformable content, and OER repositories or portals to match learning needs with suitable OER through a set of embeddable components and services to be integrated into OER initiatives;
- creation of demand services that recruit the online community and alternative format services to provide resource alternatives that meet unmet learner needs;
- collaborating with mainstream Web developers to integrate individualized learning delivery into common tools; and
- assisting the OER community in meeting the commitment to inclusive learning (Ontario College of Art & Design, 2010)

# **Thompson Rivers University (TRU) Open Learning**

Irwin DeVries, Director, Instructional Design, TRU is acting for Thompson Rivers University as the Open Learning representative to the OER University project (OER u), of which TRU is a Founding Anchor Partner. This is an international collaboration among 20 institutions and organizations, including BCcampus and Athabasca University in Canada. TRU is working with several of these institutions providing initial prototype courses to the project. TRU Open Learning, like AU, has a robust PLAR system that includes challenge examinations and transfer of credit, which makes it a key partner in the OER u assessment and accreditation project.

# **Contact North**

Contact North/Contact Nord is Ontario's distance education and training network. It works to provide programming from public college, universities and schools with a focus in smaller towns, rural and remote communities. Contact North works with Ontario institutions to help develop strategic, cost-effective and focused approaches to online learning. Contact North is investing in new online courses and programs based on their groundbreaking Northern course development model used in the 1990s (Anderson, 1991). Their new model is to create OER modelling the BCcampus approach according to S. Murgatroyd (personal communication, April 11, 2012). Stephen Murgatroyd is the Chief Innovation Officer at Contact North.

Contact North (October 2011) published a position paper on OER, "Open Educational Resources (OER) Opportunities for Ontario" which "set(s) out the case for OER and how their adoption can benefit all the key stakeholders in post-secondary education in Ontario" (p. 2). The paper has been discontinued online without explanation.

# **Ontario Online Institute (OOI)**

The OOI is a 2010 conception of the Ontario provincial government, which has yet to be realized. The Institute was intended to join Ontario colleges, universities and training institutions in an effort to maximize online learning opportunities for students. In his April, 2011 recommendations for the implementation of an OOI, Maxim Jean-Louis, Contact North President/CEO and special advisor to the Minister wrote that the creation and goals of an OOI would be to "facilitate the sharing of digital resources by establishing a repository of shared online learning resources and facilitate collaboration between all education and training providers" (Jean-Louis, M. 2011, p. 74). Jean-Louis (2011) further stressed the benefits of online learning and the need for a clear (government) policy framework for online learning in Ontario, hinting in several places of the need to move toward open and shared collaboration of online resources and to adopt innovative use of technology.

Unfortunately, digital resources in Ontario are not clearly identified as being OER and it cannot be assumed that this is the direction being proposed, despite Tony Bates' comments that "the recommendations suggest an organization very similar to BC Campus in British Columbia" (Bates, personal blog, 2012). Will it be a quasi-open licence only for Ontario like the BC Commons one or will the content be OER?

#### **Government of Ontario**

Similar to other provinces surveyed for this research, the Ontario government currently uses a password-protected <u>learning object repository</u> (LOR) to share resources amongst primary and secondary teachers, and to manage ownership and copyright. Although Ontario has worked with the OCAD's IDRC people to develop policy related to accessibility, and there is a degree of activity province-wide at different institutional levels with respect to OER/OEP, to date there is no evidence that any provincial policy related to OER is being considered.

# **Royal Roads University**

Spearheaded by Mary Burgess, Director, Centre for Teaching and Educational Technologies, Royal Roads University has just started an OER project to enable the sharing of selected course content, including multimedia objects, custom Moodle code and Moodle training units. The primary object of the project is to share Royal Roads on-line instructional resources with the rest of the educational community and to share their learning of the process such that other institutions are encouraged to do so as well and are supported in that endeavour (Burgess, M., personal communication, April 15, 2012). Royal Roads has been supported in its OER project by BCcampus.

# **University of Manitoba**

Dr. Lori Wallace, Dean of Extended Education stated that "using, repurposing and sharing OER, and developing a business model for OER are items on UM Extended Education's Strategic Priorities plan. On both items, we plan to collaborate with our CVU partner universities." (L. Wallace, personal communication, April 13, 2012).

# Government of Newfoundland and Labrador

Maurice Barry is the director of program development, Centre for Distance Learning and Innovation for the Department of Education, Newfoundland and Labrador (K12). The CDLI has prepared thousands of learning objects and makes them freely available from its website; but, they are all provided under a restrictive "all rights reserved" licence. At last count there

were approximately 34 courses with materials and several thousand individual learning objects. These objects were developed in-house using provincial government funding. However, since 2008, less emphasis has been placed on the creation of learning objects and very few projects have been approved. Nonetheless, Barry states they are not "taking a back seat with respect to what they are doing, and want to accomplish, with OER in their province" (M. Barry, M., personal communication, April 19, 2012).

On the other hand, Mark Hunter, Post-Secondary Policy and Program Specialist with the Government of Newfoundland and Labrador noted that the Department of Advanced Education and Skills would not draft policies for OER in higher education because provincial post-secondary institutions have autonomy from government. He also pointed out that they would not be in support of any national policy for OER (M. Hunter, personal communication, April 16, 2012).

This disagreement from two professionals in different departments of the same government is a good example of the confusion that exists over OER. This is typical of differences across the country.

### **Government of Quebec**

In Quebec, the government differs from other provincial governments regarding copyright protection in education and so is not inclined to be supportive of OER initiatives. Quebec, as Canada's only officially French-speaking province, has a thriving local francophone cultural industry, unlike the anglophone provinces that tend to rely on US cultural imports. So, the protection of the French culture in Quebec is a paramount concern and as such they are much more concerned about protecting their publishers and authors than they are about supporting open content for their educational institutions. They use the term "droit d'auteur" to translate the term "copyright", which is more in keeping with the European custom emphasizing the rights of the copyright owners over the rights of learners and other consumers. Membres du Comité sur le droit d'auteur de l'Association nationale des éditeurs de livres [Members of the committee on author's rights {copyright} of the National Association of Book Editors have been particularly vocal in expressing their opinions (Foulon, Jetté, Saint-Jean, et al., 2006). And the Quebec government has been alone of all the governments in Canada opposing the educational exemption to copyright (Geist, 2006).

Still, the higher education sector of the Ministry of Education, Recreation and Sports has supported some limited projects that release content as OER, including the shared collegiate platform <a href="DECclic">DECclic</a>. <a href="Normetic">Normetic</a> is another project under the Quebec working group on norms and standards for content interoperability that can be applied to OER, but is not specifically aimed at supporting them.

# Téléuniversité – Université du Québec à Montréal (TÉLUQ)

TÉLUQ has a policy on the dissemination of educational resources — Politique de gestion de la diffusion des ressources d'enseignement et d'apprentissage (REA). These policies relate to learning content in general and could include OER, but are also designed for proprietary content. Raymond Duchesne, General Director, noted that because TÉLUQ faculty retain the intellectual property of all original material they produce for teaching, institutional policy has limited impact on what professors do with their material outside TÉLUQ (Duchesne, personal communication, April 18, 2012).

# **Simon Fraser University (SFU)**

Helen Wussow, Dean, SFU wrote that her department (Lifelong Learning), is not involved in any OER initiatives, and commented that "any OER initiatives at SFU are faculty member specific. I know of one faculty member who puts all his lectures and course materials online as OER, but he is unique" (Wussow, H., personal communication, May 14, 2012).

#### Capilano University

Instructors at Capilano University have developed an <u>OpenCourseWare site</u> that is a free and open educational resource, but there is no evidence of any institutional support.

# **Importance of Policy**

Although several national organizations and federal bodies were contacted (Department of Foreign Affairs and International Trade; Council of Ministers of Education, Canada; the Canadian Virtual University; the Canada Foundation for Innovation; MITACS, etc.) for this report, there was either no response, and/or no information was collected to suggest any Canadian OER policy development was occurring. Responding on behalf of the Canadian International Development Agency (CIDA), the Hon, Beverley J. Oda described CIDA's support of OER only as "providing institutional support to the Commonwealth of Learning" (Oda, B.J., personal communication, May 17, 2012). There was no information in that correspondence addressing activity related to OER policy development.

The importance of policy to support OER and OEP at institutional and provincial/federal government levels should not be understated. Although projects related to learning object accessibility and openness in Canada were underway in the 1990s (e.g. Canarie, Industry Canada, the "Connecting Canadians" initiative), a change in federal government at that time brought many of the emerging initiatives to a halt. As education in Canada is solely a provincial responsibility, there is no national department of education and, by association, no federal education policy. This has left Canada alone in the international arena with respect to the development of national educational policies as the only country where such national policy initiatives are not politically possible. Indeed, the current federal government shows no appetite for this or any other 'intrusion' into provincial jurisdiction.

The <u>Council of Ministers of Education of Canada</u> (2012), an organization of the 13 provincial or territorial ministries of Education, for the first time brought up the issue of OER at a national meeting as being important for adapting to the 21<sup>st</sup> century environment. They "reaffirmed their commitment to open access to knowledge and education and to the need to adapt teaching and learning practices to the new realities of the information age." However they did not develop nor actively encourage policy development among their members.

Thus, with the exception of the few Canadian organizations noted here for their work on OER policy and practice, there is little evidence that other local, provincial or federal bodies have, or are working on, policies and practices related to OER. Described in detail earlier in this document, AU and BCcampus are actively working on policy development at institutional and provincial levels, and the IDRC actively collaborates with the Ontario provincial government at various levels on policy related to inclusiveness, accessibility and, indirectly, OER.

The need for collaborative partnerships between Canadian government and institutions and the development of policy is exemplified in the statement made in the Contact North position paper (2011) which explains "with Canada's long-established tradition of institutional autonomy, the challenge to governments seeking changes and improvements to the system is to find the best ways to influence institutional behaviour through policies, funding mechanisms and incentives, and government and community relations (p. 16).

Although some provincial government respondents offered the opinion that "government, particularly federal government, should stay away from the discussion (of OER policy/adoption)" most respondents to this survey were arguing for the need for institutional as well as government policy. Support for OER partnerships at government levels is evident in the following comment made by the Honourable Martine Coulombe, Department of Post-Secondary Education, Training and Labour (New Brunswick):

Emerging economies strongly depend on knowledge for their innovation agenda as well developing countries to expand and improve their educational systems to better foster economic growth. Supporting OER will assist in furthering such developments. The provinces and territories have been moving forward working on OER and have completed surveys though the Council of Ministers of Education, Canada (CMEC) for each of our respective jurisdictions.

(M. Coulombe, personal communication, April 27, 2012)

Perhaps as a result of work undertaken by CMEC, governments are not entirely unaware of OER/OEP and their significance. In Alberta (Alberta Education), awareness and activity in these areas includes monitoring and participating

in pan-Canadian and international dialogue on the merit of freely sharing educational resources by electronic means. While the ministry does not have a formal Open Education Resources policy, we recognize the good intentions and benefits of Open Education Resources and are working to gain a deeper understanding of the issues and costs.

(T.A. Lukascuk, Deputy Premier, personal correspondence, April 27, 2012)

Other respondents echoed these stances on the need for institutional and government policy and promotion of OER:

... policy and initiatives are crucial to OER adoption as they provide supports for early adopters and incentivize participation. Policy can be a no-cost way of enhancing education.

(P. Stacey, BCcampus, personal communication, April 2012)

Yet another respondent suggested that:

... policies would be helpful at the institutional level, but we can also work incrementally with agreements between faculties and with the Registrar's Office. The latter is slower, but waiting for institutional policy development will hinder progress on pilot projects.

(L. Wallace, University of Manitoba, personal communication, April 2012)

# **Barriers and Incentives**

In addition to the list of barriers and incentives, which follows, two individuals at opposite ends of the country (BC and Newfoundland) cited "the dark side" of OER as related to forprofit and private institutions, from very different perspectives. One stated "the problem is there is a dark side to the whole operation where the philanthropic interests of the educators are being exploited by greedy business people for profit, and academics and course designers are being removed from the education process" (G. Richards, personal communication, April 16, 2012).

The other individual reflected that "a lot of people who are in this field see the private sector as an unwanted private interloper" but qualified his statement, adding: "stuff from the private sector, however, is another valuable part of the mix" (M. Barry, personal communication, April 19, 2012).

Private sector involvement also raises the issue of funding. Private sector foundations (Gates, Hewett, Mellon, etc.) have provided significant funds and enabled corresponding growth of OER in the United States. This will be further augmented as a result of the announcement by the US Labor Department that \$2 billion has been awarded over the next four years that will support OER development of post-secondary programs of less than two years and, specifically, to "develop and make innovative use of a variety of evidence-based learning materials, including cutting-edge shared courses and open educational resources" (US Department of Labour, 2011). In Canada, only the UNESCO/COL Chair in OER at Athabasca University and the OCAD U IDRC FLOE project have significant private funding for OER research and development. Each has grants from both the William and Flora Hewlett Foundation and European granting agencies.

The expense of creating OER and the importance of creating sustainable business models and funding which move away from the early stage funding provided by foundations is perceived to be a major challenge facing Canadian policy makers and educators. On the other hand, the province of British Columbia, looking at its neighbours to the south (Washington, Utah and California) and through its own experiences, has come to the realization that OER can bring about significant cost savings and quality improvements. These developments, along with the growing understanding that the present environment depending on ever-increasing costs for proprietary textbooks, is driving the interest in OER as a cost-effective alternative.

Other barriers to OER – in this case, lack of knowledge related to difficulty of creation – are cited:

There are still many people who don't see a business case for OER, and thus don't support it. I have also heard many OER advocates say that it's easy to do OER and that is simply not the case if you want to release anything of quality. This does not help the case for those of us trying to do OER projects, since we then don't get well resourced or taken seriously.

(M. Burgess, Royal Roads University, personal communication, April 2012)

On the incentive side is the growing understanding that the current proprietary textbook business model is unsustainable and does not provide affordable individual learning resources demanded by students and parents. In the <u>USA</u>, <u>Holland</u>, <u>Poland</u>, <u>Brazil</u> and other places governments, institutions and students are beginning to realize significant savings by NOT

developing OER, nor buying proprietary textbooks. They are assembling courses or reusing open textbooks with shared OER that already exist in other jurisdictions and adapting them to their needs.

Another interesting (and perhaps understated) OER barrier related to tenure was raised by Diego Argaez (CARL), who stated:

The biggest barrier I can think of is general inertia among the vast majority of faculty in Canada towards adopting new practices. Moreover, things have to change fundamentally at the level of reviews for tenure and promotion in such a way that OER are seen as legitimate and important contributions to teaching and research. Without that, I suppose there'd probably be a lot of lip service lent to the idea of OER with nothing substantial at the end of the day that ensures broad uptake preservation and enduring access to OER.

(D. Argaez, CARL, personal communication, April 18, 2012)

On the other hand, researchers at Athabasca University are finding that they have more time for research when they assemble their courses from readily available modules (or even full courses). So, rather than developing their courses from scratch with all the work that that entails, they are taking course materials as is, leaving themselves more time to conduct research and fulfil their promotion and tenure obligations.

Acknowledging Paul Stacey's and Rory McGreal's work populating this table with the barriers, effort, confusion, special interests and incentive surrounding OER, this table elaborates on, and adds, observations derived from all respondents:

# **Barriers**

# Fear:

- fear of competition
- fear of loss of students
- fear of loss of jobs
- fear of loss of revenue
- fear of loss of control
- fear of criticism by peers
- lack of economic models for OER/OEP
- fear of accountability for use of taxpayer resources

#### Confusion:

- over OER business model
- over how open licences work in relation to copyright
- over collaboration and partnership strategies in what has been an environment of autonomy
- lack of evidence related to effectiveness of knowledge of and

#### **Incentives**

- Free of charge
- NO digital rights management (technological protection measures)
- No digital licences no permissions required
- Updating content possible at any time
- Capacity to copy, paste, annotate highlight, print out
- Mixing, mashing, altering.
   Localizing all possible
- Format shifting and moving content is possible
- Geographic movement is not limited by licence or DRM
- increase access to education

#### about OER

over 'open source' 'public domain',
 'open access' and OER

#### **Effort**

- finding OER
- finding *quality* resources and integrity of those resource
- not clear how or if it saves time or money
- finding resources that fit the specific academic context
- adapting resources to meet local academic needs

# Special interests

- publishers & copyright owners' collectives
- textbook authors who receive substantial funding
- the "not invented here" syndrome

- provide students with an opportunity to better assess and plan their education choices
- showcase an institution's intellectual outputs, promoting its profile/brand, and attracting students and government/industry support
- convert students exploring options into fee paying enrolments
- accelerate learning by providing educational resources for just-intime, direct, informal use by both students and self-directed learners
- add value to knowledge production
- reduce faculty preparation time
- generate cost savings (this case has been particularly substantiated for open textbooks)
- enhance quality and especially innovation through exposure and use of innovative practices in multiple contacts
- generate innovation through collaboration
- allow students, especially at grade school level to own, annotate and personalize their study materials

Some respondents voiced reservations which include the impact on copyright agreements; nonetheless, one Alberta government respondent (W. Royer, personal communication, April 13, 2012) suggested that there is a sentiment that if one knows what is intended to be distributed openly, then resources could be built in a different frame, using original work that can be shared.

Several times, respondents indicated that the idea of OER is admirable, but not a priority. Others (PEI Ministry of Education) are still confused by the debate, and do not understand the concept of developing material "only to give it away" – in fact, with OER nothing is given "away" – you give but you still have it, whereas now with all the restrictions and locks on the new electronic content and applications, you buy but you don't get (McSherry, 2008).

# **Summary and Findings**

Depending on one's perspective of time, OER and OEP are in a gestational period. Only ten years have passed since the term OER was coined in 2002 by UNESCO; however, while this may provide some wiggle room for countries which have not yet fully involved themselves in or embraced the concept, it does not bear scrutiny by others who are trying to forward the cause or lead the field. Ultimately, Canada has not yet established an OER presence in the international arena and has considerable work to do before it does.

As predicted, the findings of this report suggest that, with some notable exceptions, there are only a few organizations in Canada currently working to develop and establish higher level government policy, standards and protocols related to OER. Similar to the findings of the UNESCO/Commonwealth of Learning survey on Governments' Open Educational Resources (OER) Policies (Hoosen, 2011), Canadian institutions are involved in many and diverse activities centred on the provision of digital resources, but these are not all necessarily OER initiatives. Work underway with respect to open access, and openness, falls under this same category. It is perhaps an indication why the 2012 Paris OER Declaration has a clear and direct focus on the promotion, research and reinforcement of strategies and policies related to OER as opposed to activities related to openness and open access.

Further, there is an information gap in this paper related to OER/OEP in the private sector. Although the number of private sector industries contacted was admittedly small and a very poor response was received, feedback collected from government and academic sectors confirmed and reinforced that "collaborative partners are the key (to successful adoption and use of OER), *including* partnerships with the private sector" (Barry, M., personal communication, April 19, 2012). This emphasizes a need to actively solicit and consider input from private sector industry in future similar ventures.

However, some qualification is required: this investigation has focused on extracting information on activities taking place from within known institutional and private practice, but the authors were not able to source players relevant to the topic who remain anonymous or who have low profiles. And, in at least one case, there was a conflicting response from within the same institution, at very high levels. Finally, some respondents in this informal survey were much more aware of OER/OEP activities and initiatives than others, many invitations to respond to the survey questions were not answered and many potential contributors were of necessity passed over due to their lack of exposure to OER or openness in education issues.

Nonetheless, while activity in the OER arena by major educational, provincial and national institutions may appear insignificant, there is a degree of activity and interest at the individual level that is difficult to quantify but has the potential to lay the foundation for mainstream adoption of policy and practice. Ultimately, there is no doubt groundwork is being laid by at least a few dedicated players in the national OER field. Unfortunately, it remains evident that, as Coffin (2012) writes, "Canadian institutions are lagging behind the rest of the world in terms of our contribution, with very few institutions prioritizing OER creation" and on could also add OER reuse, adaptation and assembly.

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