

Open Educational Resources White Paper

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Executive Summary

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Defined by UNESCO in its 2012 Paris Declaration, Open Educational Resources (OER) include:

teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work (UNESCO, 2012).

In response to strong membership interest in OER, the Ontario Council of University Libraries (OCUL) undertook an environmental scan and analysis of current activities in the realm of open education publishing.

Documentation

The OER white paper for OCUL libraries consists of the following sections:

- Executive Summary
- Landscape of OER: review of the national and international OER landscape
- The OCUL Context: environmental scan, survey results and analysis of the OCUL context, including recommendations
- Primer: general information and terminology around OER
- Reference List
- Appendices

National Context

Currently many library consortia in North America are in the process of evaluating member interest in OER, primarily around the provision of technical and infrastructure services, education, and training support. The open education landscape has been rapidly developing as organizations such as Creative Commons engage in proactive outreach and awareness activities. Textbook Affordability Projects (TAP) and #textbookbroke campaigns have been implemented in universities and colleges across North America as the demand for affordable textbooks increases.

In British Columbia, <u>BCcampus</u> has provided funding and support in this area for a few years, triggering the establishment of a dynamic community of practice around OER in Western Canada. ecampusOntario has been following in their footsteps with the adoption and release of the new <u>openlibrary</u> platform adapted to the regional context. A range of funding opportunities has been made available through eCampus, providing support for the creation of new open texts, research projects such as toolkits and guides, as well as further platform enhancements.

OCUL Context

Research conducted for the purposes of this paper demonstrates that OCUL libraries have a strong awareness of OER trends and are interested in supporting programming and staff development in this area. In several cases, libraries have received direction from university administration to investigate opportunities and potential roles for their services. In other cases libraries have already been providing a significant level of instructional, copyright, licensing and technical support to faculty through workshops and research guides.

Given the complex nature of OER projects, a multi-stakeholder approach seems to be most fitting and many OCUL libraries have been able to collaborate with campus partners in eCampus funded projects, strengthening existing connections among libraries and other entities on campus such as Open or Online Learning offices. Libraries are known for their expertise in copyright, digital publishing and strong faculty relationships, and are well equipped to develop more services around OER; however, this mostly occurs in active collaboration with other stakeholders on campus.

Takeaways

The OER environment in Ontario and worldwide continues to be a rapidly-changing one, and so it is expected that institutional needs and activities will continue to evolve accordingly. Responses to the OCUL OER survey for libraries and stakeholders reflect this uncertainty by demonstrating that libraries are interested but cautious when starting new OER projects, as there might already to be an established community of practice for open education on their campuses.

OER is a highly collaborative multi-stakeholder area which requires the following areas of expertise:

- technical knowledge,
- accessibility and universal design principles,
- copyright,
- · instructional design, and
- funding support and grant writing.

To meet some of these needs and address the complexity of the OER environment on campus, OCUL libraries are currently in the process of establishing a clear understanding of ongoing open education initiatives on their campuses, evaluating their own capacity for providing support in this area, and developing training for staff around the creation and adoption of OER materials.

Landscape of OER

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"Open education is a learning environment accessible to anyone" (Moore & Butcher, 2016)

Introduction

In response to strong membership interest in OER, OCUL formed an OER Working Group in the Fall of 2016. The group was tasked with developing a white paper, providing an environmental scan of current activities across OCUL institutions, as well as a list of recommendations for the consortium and member libraries. A final version of the paper was distributed in October 2017.

Working group members included:

Katya Pereyaslavska, Online Learning and Accessibility Librarian, Scholars Portal (**Project Lead**)

Scott Cowan, Librarian, Information Services, University of Windsor Library **Catherine Davidson**, Associate University Librarian for Collections & Research, York University Libraries

Anika Ervin-Ward, Administration and Communications Coordinator, OCUL **Amy Greenberg**, Assistant Director, Scholars Portal

Ann Ludbrook, Copyright & Scholarly Engagement Librarian, Ryerson University Library **Heather Martin**, Copyright Officer and Manager, E-Learning & Reserves, University of Guelph Library

Carole Moore, Chief Librarian (retired), University of Toronto Libraries **Lillian Rigling**, Research & Instructional Services Librarian, Western University Libraries

Scope

The working group focused on the following topics:

- Overview of the current teaching and learning environment
 - faculty perspective
 - student perspective
- Environmental scan of national and international OER initiatives across libraries
- Legal considerations and licensing for producing and repurposing existing works
- Accessibility implications
- Technology and tools in use
- Current opportunities and the next frontier

Methodology

Throughout Fall 2016 and Winter 2017, the working group consulted with staff at OCUL institutions, reached out to the Council of Ontario Universities (COU), Ontario Colleges Heads of Libraries and Learning Resources (HLLR), the Association of Research Libraries (ARL), Orbis

Cascade Alliance, BCcampus and ecampusOntario. Information was also gathered via literature review, group discussions and presentations, a webinar, and a formal survey distributed via OCUL Directors. This information is presented below together with a series of recommendations around opportunities for libraries.

Faculty Perspective

The rise of the open education movement is creating new opportunities as educators and trainers exploit open educational resources (OER), ranging from simple digital teaching assets to full courses, and related practices to secure the effective utilization of these resources (Tuomi, 2013). Among these opportunities are: greater autonomy brought by the ability to select from more diverse resources; fostering a culture of critiquing, and thereby improving, pedagogical practice; and increasing overall engagement with educational materials by both learners and educators (Farrow, 2017).

While these pedagogical opportunities may not be fully realized at present, Hilton (2016) found in a literature review of 16 different surveys, that faculty do have a generally positive attitude to OER. This is often for the very practical reason of enabling more of their students to access course materials by lowering or eliminating the cost.

These positive attitudes and opportunities, however, have not yet resulted in widespread adoption and reuse. "The fundamental problem is that OER, after ten years of advocacy work by stakeholders worldwide, still needs to be mainstreamed more integrally into educational policies and practices" (UNESCO, 2016, p.3).

When it comes to faculty creating OER, frequently perceived challenges include the time needed to develop resources, technology issues and concerns about licensing and copyright (Delimonta, Turtleb, Bennett, Adhikarid, & Lindshield, 2016). While OER are becoming more readily available, the perceived suitability of these resources and their challenging discoverability may also present barriers to use, as may be a perceived lack of institutional support and incentives for creating and using OER.

In their 2015-16 survey of over 2000 U.S. faculty, Allen and Seaman (2016) noted that introductory courses were more likely to use OER than later year courses, and common driving factors for faculty choosing OER included the cost to students, the comprehensiveness of the resource and ease of discovery. However, there remains ongoing confusion or lack of clarity amongst faculty about what OER actually are.

According to Allen and Seaman's study (2016, p.11) the biggest barrier to adoption or selection of OER for course materials is "the effort required to find and evaluate such materials". This is consistent with the biggest reported barrier in earlier studies conducted in 2013-14 and in 2011-

2012. Interestingly, the authors suggested that libraries may be in a unique position to support faculty discovery and selection of OER because:

"There is no corresponding support network for open textbooks that can mirror the extensive network provided by commercial publishers. It requires much more faculty effort to search out open textbooks, especially since many faculty are unaware of the very existence of such alternatives" (Allen & Seaman, 2012, p. 41).

While these findings describe the U.S. context, a similar situation can be found in Canada. The 2014 Canadian Association of Research Libraries (CARL) working paper, *Open Textbooks:* opportunities for research libraries cites challenges to open textbooks which include "quality control and content vetting; IT infrastructure; intellectual property; business models and interoperability" (p.3). Institutional faculty incentives to create open resources are still minimal with the notable exception of the University of British Columbia's new faculty guidelines for tenure, promotion and reappointment which explicitly incorporate OER as examples of contributions in the area of educational leadership:

Evidence of educational leadership is required for tenure/promotion in the Educational Leadership stream... It can include, but is not limited to... Contributions to the practice and theory of teaching and learning literature, including publications in peer-reviewed and professional journals, conference publications, book chapters, textbooks and *open education repositories / resources* [italics added] (p. 16).

The issue of quality as it pertains to open resources is cited repeatedly across the literature on OER. According to Allen and Seaman (2016) educators who use OER generally rate their quality as equal to or higher than proprietary resources. However, UNESCO (2016) notes that "OER do not automatically lead to quality...; much depends on the procedures put in place." For this reason UNESCO recommends "improving the quality of learning materials through peer review processes" (p. 4).

While some materials created openly might not have the aesthetic appeal of their commercially produced cousins, a more important consideration is student learning and academic success. If a given material provides the type of learning support a student needs then it should be considered a high quality resource.

Faculty Incentive Programs

Programs offering incentives to faculty - such as financial support, honoraria, or technical support - have been a widely-adopted strategy to stimulate creation and adoption of OER, in addition to financial incentives such as institutional grants through organizations such as ecampusOntario. However, many institutions lack formalized policies to create greater and longer-lasting incentives in this area. There is also little knowledge about how many OER resources are being adopted in classrooms, and how they are used and evaluated. Evaluations are frequently related to textbook cost savings for the students as well as use.

Additionally, to promote both the adoption and creation of OER, educators can be encouraged to consider:

- learning how to locate and identify licensed materials online to use in teaching and presentations,
- identifying potential sources of OER suited to their curriculum,
- finding, reusing and sharing open content,
- ensuring that they use openly licensed materials
- providing correct attribution when putting teaching and learning materials into an open environment, and
- practicing creating OER by posting educational media and assigning Creative Commons licensing.

Institutions at the local or provincial level can assist faculty in other ways as well. For example, BCOER has written the <u>Faculty Guide for Evaluating Open Educational Resources</u> - a one-page checklist which faculty can use to evaluate the quality of the resources they are producing.

Further discussion of the faculty perspective as it pertains specifically to OCUL institutions, can be found in The OCUL Context section of this white paper.

Student Perspective

Benefits of OER

In Canada, an increasing number of student groups have been promoting the cost-saving value of open access textbooks as part of #TextbookBroke campaigns that draw attention to the impact of high-priced textbooks. Inspired by the <u>B.C. Open Textbook Project</u>, the Canadian social media campaign was started by students at the University of Victoria (ebeattie, 2016). In Ontario, the <u>Brock University Student Union</u> has been active in the advocacy for OER on campus and the Western University Student Council has developed a <u>Standing Policy on OER</u> (Benac & Chang, 2016).

Accessible OER have an additional advantage of removing barriers for students with print disabilities. These students are often required to purchase print copies of textbooks which university libraries might already own, for the purpose of conversion to a readable DRM-free digital format.

Cost savings are not the only way students benefit from OER. Fischer, Hilton, Robinson and Wiley (2015) investigated several courses using OER in 10 American colleges and found that those students received equal or better grades than students taking comparable courses using traditional textbooks. Also significant was the finding that students using OER enrolled in a higher number of courses in the next semester, which is indicative of progress towards

graduation. These conclusions support correlations between use of OER and higher grades, and use of OER and lower course withdrawal rates, seen in a pilot study at the Virginia State University School of Business (Feldstein et al., 2012).

Pedagogically, the trend towards openness benefits students by reframing their role from consumers to producers of educational resources. Replacing "disposable assignments" with "renewable assignments" also means that students entering a course have an opportunity to learn from the previous cohort (Jhangiani, 2017; Wiley, 2013).

Impacts of Textbook Costs

As mentioned above, student advocacy has primarily focused on the escalating cost of traditional textbooks, but it has also called attention to related practices in the textbook publishing industry such as the bundling of content, the use of access codes to control access to ancillary materials and eliminate no-cost options for learning materials, and the elimination of the used textbook market by frequently updating editions (Student Public Interest Research Groups [PIRGs], 2016).

The U.S. PIRG Fund and Student PIRGs (2014, p. 7) reported that in the past decade, "textbook prices have increased by 82%" and that "...textbooks remain one of the largest out of pocket expenses for students and families – meaning that high price tags are yet another threat to affordability and accessibility of education in the United States". Surveys conducted in 2010, 2012 and 2016 by the Florida Virtual Campus found that "the high cost of textbooks is negatively impacting student access, success and completion" (Florida Virtual Campus, 2016, p. 10).

A number of studies have explored the link between rising textbook prices and the impact on students. Those impacts range from financial hardship to academic challenges to social and mental health consequences. While the majority of studies have been US-based, a University of Guelph survey conducted in the Fall of 2016 seemed to indicate that the same issues exist for post-secondary students in Canada. Detailed survey findings are available in The OCUL Context section of this white paper.

Academic Libraries and OER

Academic libraries across North America and Europe are already playing a role in the promotion and support of OER for the higher education community. Some consideration of collaborative approaches to OER support is also underway.

Textbook Affordability Projects

Textbook Affordability Projects (TAP) and #textbookbroke social media campaigns meant to raise awareness of the exorbitant cost of textbooks have been implemented across universities and colleges across North America, in some instances spearheaded by libraries in partnerships with bookstores. "Academic libraries are eager to demonstrate their leadership in the textbook affordability movement, and there is great enthusiasm for initiating local projects" (Bell, 2017, p. 375).

In a recent survey, Bell (2017) found that approximately 90% of both libraries and campus bookstores were supportive of TAPs, though it was unclear whether these referred to collaborative projects or independent efforts. Nevertheless, there seems to be common groundwork for bookstores and libraries to collaborate in the future:

Here are some of the key takeaways that refute...common misperceptions about the relationship [between libraries and bookstores]:

- Evidence of distrust or enmity between academic libraries and campus bookstores is unsupported in the survey results.
- Both librarians and bookstore personnel express a desire to work together to advance textbook affordability on campus.
- Bookstores are open to conversations about textbook affordability but would expect the library to initiate.
- Neither librarians nor bookstore personnel see the other as their competition on campus. (p. 376)

ARL Spec Kit

In July 2016, the Association of Research Libraries (ARL) published <u>Spec Kit 351: Affordable Course Content and Open Educational Resources</u>, which reviewed the implementation, governance and funding of Affordable Course Content (ACC) and OER materials across the ARL membership. Other areas of focus included: current practice, faculty incentive programs and other engagement strategies, and library expertise in the areas of ACC and OER.

Results indicate that these areas are highly collaborative, involving multiple stakeholders - libraries, instructional design units, student organizations, bookstores, central IT and even local or regional consortia (Walz, Jensen & Salem, 2016, p.3). Libraries were found leading these

initiatives more frequently than other units on campus, with senior university administrators (president, provost, vice-provost) leading in the next highest frequency.

Why are libraries so well situated to play such a central role? Advocacy work around OER/ACC can build on existing foundations of librarian expertise (copyright, content, etc.) in parallel with established channels of outreach to faculty and other campus partners. In other words, libraries can play a vital role in helping faculty find and identify open content, and connect them with additional services (Walz, Jensen, & Salem, 2016, p.4).

Orbis Cascade Survey: Role of library consortia

In December 2016, the OER Working Group of the <u>Orbis Cascade Alliance</u> (OCA) distributed a survey intended to gather information about the activities of library consortia across North America in supporting their membership in the area of open education. A copy of the survey is provided in <u>Appendix A</u>.

Out of 18 responses (which included OCUL), 5 consortia indicated they had no current role in providing support for OER, and 13 indicated that their main roles were providing education and/or facilitating discovery. Three respondents indicated a role in securing funds towards the development or maintenance of OER resources (OCA OER Working Group, 2017, p.3).

Consortia were also asked what future roles they were expected to play in this area. Responses included:

- creating, storing/managing, and ensuring access to OER;
- centralizing access, hosting, curation and preservation of OER;
- enhancing OER metadata;
- expanding and solidifying agreements among members and partnerships with other consortia;
- funding creation of OER and research projects such as an OER toolkit (information, resources, and best practices);
- providing access to training and education about OER;
- facilitating advocacy and awareness;
- delivering educational programming to faculty and educational technology professionals on scholarly licensing, including Creative Commons principles;
- developing professional competencies for new roles as advocates for affordability and leaders on their campuses;
- advocating for institutional policies that support Open Access, Open Education, and Open Data; and
- providing access to existing networks such as the <u>Open Textbooks Network</u> and <u>Affordable Learning Georgia</u> (OCA OER Working Group, personal communication to the OCUL OER Working Group, March 7, 2017; OCA OER Working Group, 2017, p.4-5).

JISC

JISC is a UK-based non-profit membership-driven organization providing access to shared digital infrastructure and services. JISC's guide to <u>Open Educational Resources</u> includes a section on "<u>Technical & data management considerations</u>" exploring consortial roles for storage and dissemination of open resources, support for description and metadata, distribution across the web, and usage tracking (McGill, 2010).

The <u>OER IPR Support Project</u>, a joint effort involving JISC and Creative Commons UK, has developed a suite of tools to assist users with intellectual property rights (IPR) issues involving OER. The online toolkit consists of multiple modules and includes general copyright and licensing information, as well as workflow documents, a license compatibility wizard, and templates for requesting permission.

SUNY OER service

<u>Open SUNY Textbooks</u> provides its members with access to a collection of open texts. This service provides support for the development of new learning materials for students and access to a common platform to "remix, reuse, revise, redistribute and retain" open materials (Open SUNY Textbooks OER Services, n.d.). SUNY will also be investing \$4 million dollars they received from the state of New York to implement OER in high-enrollment, general education courses by making access to this fund available to member institutions that can demonstrate commitment to inducing classes to use OER materials, developing sustainability models for OER on campuses, and collecting enrollment and savings data with regard to OER courses.

SUNY is currently developing a plan for how to use the funds. Campuses receive \$20,000 plus \$8 per student in an OER course or \$15 per student for courses in which all sections use OER.

SPARC LibOER and Connect OER

<u>Scholarly Publishing and Academic Resources Coalition (SPARC)</u> is an organization of 200+ academic and research libraries in Canada and the United States actively promoting Open Access. SPARC also works with authors, publishers, libraries, students, funders, policymakers and the public.

The <u>SPARC Libraries & OER Forum</u> (LibOER) is a public Google discussion list for academic and research librarians with an interest in OER. Its focus is on sharing ideas, resources and best practices around OER; providing librarians with an extra channel of communication around upcoming events and educational opportunities; and disseminating updates about research and policy projects.

<u>Connect OER</u> is a searchable directory of academic institutions across North America currently engaged in OER activities on their campus. In its pilot first year, 65 SPARC institutions, including 7 Canadian institutions, created profiles using this platform (Yano, 2017). The platform

provides a description of OER activities and contact information for these campuses. Additionally, SPARC produces an <u>annual report</u> based on the data in this platform on the state of OER in North America.

OER Authoring Platforms and Tools¹

While an exhaustive list is beyond the scope of this paper, a few of the most popular tools and platforms are described briefly below.

PressBooks

Due to its growing prevalence, the current authoring tool of choice when creating Canadian open textbooks is <u>Pressbooks</u>, which is used by BCcampus' <u>Open Textbook collection</u> as well as ecampusOntario's <u>Open Textbook Library</u>. The interface is fairly intuitive and has a relatively small learning curve.

Authors can collaborate in Google Docs, creating content in a familiar collaborative environment that facilitates a multi-author editing process, and import their final works into Pressbooks in ePub without losing formatting.

Rebus Community

The Rebus Community is a Canada-based non-profit organization that currently provides support for authors and reviewers by means of a <u>forum</u>, <u>creative commons licensing information</u>, and <u>pilot projects for producing open textbooks</u>. Through feedback and experience gained via these methods the community plans to ultimately create tools designed to meet users' needs and "developing a new, collaborative process for publishing open textbooks, and associated content" (Rebus Community, n.d.).

OER Commons

The Institute for the Study of Knowledge Management in Education (ISKME) has created <u>OER Commons</u>, their "digital public library and collaboration platform" (ISKME, 2017). The commons provides a starting point for searching OER by <u>curating collections</u> of texts, courses, and other OER. Beyond this, OER Commons also offers the <u>Open Author publishing tool</u> for texts and course modules. Like Pressbooks, allows authors to import documents from Google Docs and to be exported as PDFs.

¹ The OER Working Group would like to thank Dave Johnston, Scholarly Communications Coordination at the University of Windsor Leddy Library, for contributing much of the content in this section.

SCALAR

Products like SCALAR provide a content creation platform similar to the creation of a website through a Content Management System (CMS) like Drupal. The advantage of this is that it produces a product that doesn't have to be consumed in a straightforward linear fashion like a PDF file, chapter to chapter. Readers are able to pull together pages of related content from across the book as long as it has been effectively tagged, and navigate the book by visualizations of its content that map out the connections between its nodes. Books can easily be forked to create alternate versions which might include new chapters for country-specific content and translations, and can be edited down to the sentence level.

Additional tools and platforms in the Canadian context include:

SOL*R

Shareable Online Learning Resources, or <u>SOL*R</u>, is the BCcampus online learning resource repository launched in 2006. It was built to share content developed under the Online Program Development Fund (OPDF) but also contains non-OPDF content.

Post-secondary educators from BC public institutions have access to this platform through BCcampus and are also able to contribute content. The general public can access Creative Commons-licensed resources with a guest account. BCcampus provides technical support for platform users. Features of this platform include: global sharing and local sharing, resources from multiple institutions, interoperable and modular learning resources, resource tagging, advanced and automated search capabilities (including RSS feeds), federated search, CMS integration, support for secure resource sharing with certain groups of faculty or course developers to enable collaboration, usage tracking, and version tracking.

Open Monograph Press

Several OCUL libraries, either individually or through Scholars Portal, use the Public Knowledge Project's Open Journal Systems (OJS) and Open Monograph Press (OMP) software. A current list of schools using OJS and OMP is available on the SPOTDocs wiki.

The University of Windsor has been using OMP to publish books in the <u>Windsor Studies in Argumentation Series</u> since 2013. At its core, OMP provides the kind of functionality for book publishing that OJS managers are familiar with for journal publishing. From an administrator's perspective, the system's workflow is intended to accept manuscript submissions which can then be piloted through a review and editorial process which ultimately leads to publication. Insofar as the creation and publication of a book is intended to mirror the traditional process for creating and publishing journal articles, OMP does a good job.

The weakness of OMP is due to its close emulation of OJS. The assumption is that the objects to be published are something like PDFs, EPUBs, or MOBI files - they will be created and edited by software platforms outside of OMP, ingested when required, and remain relatively static afterwards. Unlike other products such as SCALAR, there are no authoring tools within OMP.

To summarize, OMP is effective at what it does much like OJS can be. However, it lacks the authoring tools available in other emerging e-book platforms and is limited by the assumption that users will always want their digital book to function like a traditional printed book but in electronic form.

Accessibility Considerations

As faculty at Ontario universities begin to produce OER, they become publishers of educational content and therefore responsible for ensuring that what they produce adheres to the Accessibility for Ontarians with Disabilities Act (AODA) by meeting Web Content Accessibility Guidelines (WCAG) 2.0 accessibility criteria. Educational content or learning objects that contain quizzes, audio, video or images need to consider users of all abilities and how they access materials.

The <u>BC Open Textbook Accessibility Toolkit</u> provides tips throughout the authoring process for incorporating universal design and accessibility principles and outlining best practices for incorporating multimedia materials.

An accessibility statement on how to request another format should always be included with each resource on its landing page. Instructors who choose to reuse materials created elsewhere and put them in their own course websites take on the responsibility of making this content accessible to their own users.

Copyright Considerations

Whether adopting and repurposing an existing OER, or creating a new work, copyright and licensing considerations present numerous challenges for instructors. When adopting an existing OER, attention must be paid to the licensing scheme of the original work to ensure that re-use is in keeping with the license terms. When adapting or repurposing a work, care must be taken to ensure that the adapted work is assigned a license that is compatible with that of the original work. OER licenses must be chosen and assigned in a manner that facilitates use by the anticipated end-user of the work. There are also numerous sensitivities that may arise with respect to faculty's interest in the control and dissemination of their own intellectual property, which may sometimes be in conflict with the goals of open education.

Choosing a License

Most, but not all, OER works are released under a Creative Commons (CC) license. There are various types of CC licenses, any of which can be assigned to an OER. Creative Commons license types range from the most open versions (CC BY, CC BY-SA) which allow users to adapt, remix, and even use the content commercially, to the more restrictive licenses (CC BY-ND, CC BY-NC) which permit re-use but prohibit adaptation of the work and/or use for commercial purposes. Increasingly the CC BY license (the most expansive CC license) is becoming the standard recommended by the OER movement, as it allows for the most flexible reuse options and enables all educational institutions, even private colleges and universities, to make use of the content.

Figure 1

Table Summarizing Permitted Uses by Different CC Licenses

ALLOW COMMERCIAL USES OF YOUR WORK?

		Yes	No
OUR WORK?	Yes	Attribution ⁱ CC BY	Attribution-NonCommercial ⁱⁱ CC BY-NC
SICATIONS OF Y	Yes, as long as others share alike	Attribution-ShareAlike ⁱⁱⁱ CC BY-SA	Attribution-NonCommercial-ShareAlikeiv CC BY-NC-SA
ALLOW MODIFI	No	Attribution-NoDerivs ^v CC BY-ND	Attribution-NonCommercial- NoDerivs ^{vi} CC BY-NC-ND

¹Yes + Yes = Attribution CC BY

From "Creative Commons License Quick Selector Tool" by University of Toronto Libraries, 2015 (https://tspace.library.utoronto.ca/handle/1807/69997). CC BY 4.0.

Many granting agencies, such as ecampusOntario, will specify in their contract the type of licenses that they require OER authors to attach to their works. Currently eCampus requires OER authors to use the CC BY license in order to fully enable reuse, adaptation and commercial distribution. This follows the BCcampus commitment, in partnership with Rebus Community, to only publish and support CC BY works going forward (ebeattie, 2016). Other granting agencies may require OER authors to adopt other types of licenses.

ⁱⁱ No + Yes = Attribution-NonCommercial CC BY-NC

[&]quot;Yes + Yes, as long as others share alike = Attribution-ShareAlike CC BY-SA

iv No + Yes, as long as others share alike = Attribution-NonCommercial-ShareAlike CC BY-NC-SA

^vYes + No = Attribution-NoDerivs CC BY-ND

vi No + No = Attribution-NonCommercial-NoDerivs CC BY-NC-ND

If granting agencies are not involved, an OER author is free to decide which type of open license is most appropriate for their work. However, studies show that knowledge of open licenses, license compatibility, and the implications of license choices, is very low among faculty (Allen & Seaman, 2016, p. 14). Failure to understand how specific CC licenses enable the use, reuse and repurposing of content in various contexts can be a serious obstacle to OER creation and dissemination. Authors also need to understand that Creative Commons licenses are irrevocable, meaning that though they can later change their mind and assign a more restrictive license to their work, the earlier license will still apply to anyone who discovered or used the work before the license change. University libraries and copyright offices can provide the necessary expertise to assist faculty with understanding the complexities of open licensing, and in making decisions about license assignment, or combining differently-licensed materials when adapting and remixing content from multiple sources.

Institutional Copyright Policies and Practices

At Ontario universities, most faculty employment contracts specify that faculty retain ownership of copyright in the works they create, rather than assigning it to the university. There may be some exceptions to this practice: a separate agreement might be signed by both parties indicating otherwise. Faculty unions can also be protective of their members' right to copyright, and suspicious of copyright transfers. A university's mandate towards openness may be viewed as in conflict with instructors' rights to control their own intellectual property, especially in the case of sessional and contract instructors. Similarly, openly licensed content produced by university employees may sometimes be at odds with their own or their university's desire to monetize certain materials to generate revenue. Further tensions may arise at the departmental level, when faculty who have authored commercial textbooks become concerned about the loss of royalties when another instructor develops an openly licensed textbook in the same subject area.

Third Party Content

Assigning a Creative Commons license to a work does not mean that the OER cannot include third party content. However, when permission is sought to incorporate third party materials, it is important to have a well-crafted agreement that allows for the use of the third party material in keeping with the CC license being assigned to the new work. It can be a challenge to obtain such an agreement from traditional permission sources as they may not wish to assign an open license to their work, nor have it publicly available on the Internet. However, if a permission agreement is successfully negotiated, it is essential that the third party content is marked as such, with attribution clearly indicated, as well as a statement that makes clear that it is not subject to the same license as the rest of the work.

Third party material may also be used without permission if the amount used is insubstantial, meaning that the portion of the work used is not significant enough to attract copyright protection. Examples might include short quotations from works. The fair dealing exception in the Copyright Act may also permit the reproduction of some content for purposes such as research, private study, education, criticism and review. As with all third party materials, such uses must be clearly marked and attributed, indicating that it is from a third party work and being

used under the fair dealing exception, and not governed by the same license as the entire work. There also can be copyright implications in using public domain materials in the OER work, as the term of copyright varies by jurisdiction. For example, materials which are in the public domain in Canada may not be in the United States or Europe. One is always free to link to third party materials; however, it will be necessary to check URLs on a regular basis to ensure that they remain active and try to use stable or persistent URLs where these are available.

Roles for Libraries

There are a number of key areas where faculty producing OER require support. Depending on institutional mandates and capacity, libraries can offer support in some of the following areas.

Licensing

CC BY or other Creative Commons licenses

- Do authors understand implications of this kind of license?
- How do authors verify for originality, ensuring content they adopt is original or properly cited?
- Do granting agencies have a contract that makes it very clear that 1) the CC BY license allows an author's work to be modified, and 2) beta testing in classrooms may result in ongoing editing?

Education

Classroom use

• What education do students require in the area of copyright and licensing to ensure that they understand the implications of contributing to an open publication?

Production

- Are there opportunities for libraries to support the copy editing or peer reviewing process? <u>The University of Hawaii guide</u> could be adopted to another context.
- If a faculty member wants to collaborate with others, are there groups already working on a book that they can join?
- How do authors handle graphic design?
- How do extra resources get integrated as part of publication? (e.g., PPTs, quiz questions, case studies, etc.)
- Identification of open license materials for reuse or adaptation. Interpretation of license terms of existing material.

Peer review

- What peer-review guidelines are in place and how are reviewers sourced?
- Are there incentives offered to reviewers to provide quality feedback?

Technology

- Facilitating access to and training in the use of authoring tools and platforms such as Pressbooks
- Workflow support/design support
- Hosting OER products

The Next Frontier: Sustainability of OER and open pedagogy

To fully understand the current landscape and the level of OER integration into the curriculum, universities need to consider ways in which they could track current practices, focusing on the following:

- How many OER are being created by faculty at institutions? Unless faculty work directly with campus units, it is a difficult activity to track.
- How many OER are being adopted for class use across Ontario universities? Instructors select their course materials independently, but in some cases might not even be aware that what they use is an OER, or they simply have no way of sharing this information.
- There are a number of known barriers to faculty adoption of OER, such as awareness, technical capacity, concerns about quality and maintenance, etc. University focus groups and faculty peer to peer mentorship programs might dispel some of these concerns.

In addition, since OER materials are intended to have a longer shelf life than traditional learning materials, they require maintenance to keep them up to date. Challenges in this area include:

- the need to document information for each resource about its licensing, source, file types, and short descriptions of the content;
- developing processes to ensure that books are up to date;
- recording version revisions and dates;
- deciding whether a collection will collect and maintain access to older versions and editions of material, or only provide access to the most current version; and
- identifying gaps in the collection. Targeted outreach to faculty and students can be helpful in this regard, and can inform future grant applications.

As more online courses are being offered across universities in Ontario, some with added incentives from the eCampus <u>2016-2018 Online Program Development</u> initiative, the move towards open education seems to be the next logical step.

Some instructors who are active in the OER movement promote the value of collaborating with students and inviting them to edit or author portions of their open texts. Given this shift, it is important that libraries which already provide technical, educational and copyright support to faculty authors, also consider providing this support to students. This helps to ensure that they understand the implications of contributing original content to open resources.

OER is a new and emerging area with many diverse stakeholders and many very new issues such as sustainability, adoption and currency. New workflows and processes need to be established for authors who publish openly and for organizations who provide support in this area. The takeaway issue revolves around what is a publishing system that is scaleable and sustainable in the long-term, and what roles can libraries play in this process?

The OCUL Context

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About

This section summarizes findings from an OCUL OER environmental scan and concludes with recommendations for OCUL as a consortium and for institutions locally in the areas of training, sharing of resources, and partnerships.

Survey Findings

In early 2017, the OCUL OER working group developed a series of survey questions intended to capture library and university-wide stakeholder activities in the area of open educational resources. The survey was divided into two sections: Questions for Libraries (13 responses received) and Questions for OER Stakeholders (14 responses, including 3 from one institution). In the Spring of 2017 a copy of the complete survey was distributed to each OCUL Director to forward to stakeholder units as appropriate, and responses were collected until the end of June 2017. The complete list of questions can be found in <u>Appendix B</u>.

The following sections summarize the survey responses as they pertain to overall issues of service, policy, technical and educational support, funding, institutional context, and the role of libraries and large organizations in offering support around OER.

General support

OCUL libraries currently provide various levels of OER support for faculty. Many provide guides for finding, developing, and using OER; or actively promote open scholarship through blog posts and FAQ on the library website.²

From the survey results, it is evident that at least 40% of OCUL institutions - either through the library, another campus unit, or both - are committed to providing some level of faculty support, often via multiple channels:

- nine of the 13 OCUL libraries and 9 of the 14 campus stakeholders that responded to the survey offer OER research guides,
- eight libraries provide advocacy or educational materials for faculty,
- four libraries are striking working groups to evaluate their role in creating and housing OER.
- eight campus stakeholders provide funding, and
- seven campus stakeholders offer technology training workshops.

http://libguides.lakeheadu.ca/opentextbooks

http://guides.library.utoronto.ca/c.php?g=250575&p=1679677

http://subjectguides.uwaterloo.ca/content.php?pid=257992&sid=5693083,

http://leddy.uwindsor.ca/open-educational-resources and http://leddy.uwindsor.ca/open-fag

http://library.queensu.ca/help-services/scholarly-publishing/open-access-queens

² Examples include:

A number of Ontario's universities are actively supporting the use and development of OER at an institutional level. Carleton University, for example, hosts a <u>repository of Creative Commons</u> <u>licenced OER</u>. The university also offers a <u>Certificate in Blended and Online Teaching</u>, for which all the materials are themselves open educational resources.

The University of Toronto promotes open scholarship and OER through its Open.UToronto initiative. The Open.UToronto site "serves as a hub to connect projects, people, groups and organizations interested in "Open" (University of Toronto, n.d.). The site includes links to locally-produced OER, current projects, and the Ontario Online curriculum.

University of Guelph, Ryerson University, UOIT, University of Waterloo, Western University, University of Windsor and York University all promote OER and open learning through their Teaching and Learning or Open Learning units. These activities range from workshops to online resources, blog posts and webinars.³ In some cases the library coordinates with these other units to provide specific information and resources through workshops or libguides.

OER policy

Eighty-five percent of OCUL library respondents do not have an OER policy while 15% of respondents indicated that a policy was currently in the making. This closely mirrored the stakeholder responses, indicating that libraries tend to align themselves with institutional direction in this area.

https://opened.uoguelph.ca/

http://tlc.apa.uoit.ca/teaching-tips/planning-a-course/

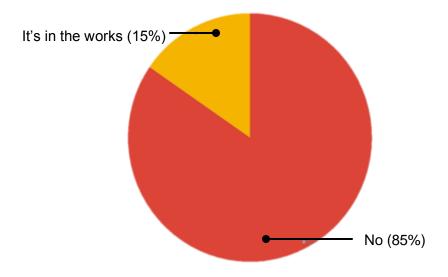
http://elearningtoolkit.uwo.ca/index.html

https://uwaterloo.ca/centre-for-teaching-excellence/events/open-educational-practices-cte755 http://cleo.uwindsor.ca/openlearning/

http://teachingcommons.yorku.ca/event/webinar-copyright-open-educational-resources-and-teaching/?instance_id=1729, and http://teachingcommons.yorku.ca/blog-26/

³ For example:

Figure 2
Responses to the Question "Does Your Library Have an OER Policy?"



Technical support

In their survey responses 3 libraries indicated that they provide technical support in the area of OER, while 6 said this work is done by the Teaching and Learning/Open Learning offices. Other libraries commented on lack of established processes on campus, with various offices providing support to faculty.

Libraries that provide technical support use institutional repositories, BePress, Dspace, Pressbooks, and other tools based on faculty needs.

Educational support

Survey responses indicated that educational support is provided by the library as well as Teaching and Learning/Online Learning offices, in some cases lead by student #textbookbroke campaigns. Educational support consists of providing awareness and technical training sessions to faculty and staff which often include technology demonstrations.

Funding

Three responding libraries indicated awareness of institutional funding opportunities specifically for OER available through various offices. Although not specifically offered for OER projects, 6 institutions indicated the availability of awards and grants that are generally broad in scope and could be used for this purpose. Ten libraries indicated that no institution-wide funding was available for OER projects specifically and 6 libraries said they relied on ecampusOntario to fund OER projects.

It is possible that if prompted further, the libraries that mentioned lack of OER funding may have access to grants within their institution applicable to OER projects. Five of the stakeholder responses to the same question highlighted a number of grants which could be used towards the creation or adaptation of OER, although they were not specifically created for this purpose. These include: \$5,000-\$10,000 towards open resource development and open course development; \$7,000-\$20,000 offered through a Learning and Teaching Enhancement Fund; Instructional Technology Innovation funds ranging from \$2,000-\$20,000; and Teaching and Learning grants of up to \$500 through one institution's Centre for Pedagogical Innovation. More investigation is needed at the institutional level to develop a list of funds which could be used towards the development or maintenance of OER materials.

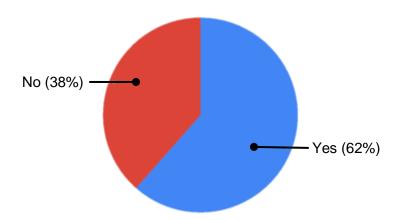
Campus context

Sixty-two percent of the OCUL library respondents indicated that they were involved in university-wide OER initiatives or working groups / task forces.

These involve a range of working groups lead by different campus stakeholders such as,

- Teaching Support Centre,
- Vice-Provost & University Librarian, and
- Centre for Academic Excellence.

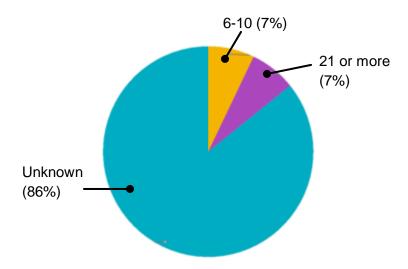
Figure 3
Responses to the Question "Does Your Library Take Part in University-wide OER Initiatives or Committees?"



Faculty perspective

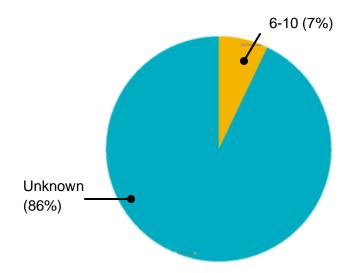
A series of questions in the survey for campus stakeholders collected information on the faculty perspective. One question asked how many faculty were publishing open educational resources. Eighty-six percent of respondents indicated faculty had not created or published OER materials, 7% said their faculty have created around 6-10 titles up to the present and another 7% indicated there were 21 or more OER titles created by faculty in the past few years.

Figure 4
Responses to the Question "How Many Faculty Have Created or Published OER at Your Institution?"



Regarding use of OER in courses, 93% of respondents were unclear as to how many courses on their campuses use OER materials whereas 7% indicated between 6-10 courses were using OER. Additional feedback explained that tracking this information was difficult unless faculty had worked directly with units responsible for supporting the creation of OER materials.

Figure 5
Responses to the Question "How Many Courses Use OER at Your Institution?"



When asked whether respondents saw a connection between OER usage and specific disciplines, 4 answered positively. They all indicated that usage was more significant in the sciences due to standardization of content, availability of resources, well-established practice around sharing resources within the discipline, and self-paced pedagogical models.

On the subject of how faculty feel about OER, a range of views were cited. On the supporting side, faculty were said to

- embrace the concept philosophically,
- demonstrate strong interest in the subject,
- be intrigued and genuinely concerned about the price of textbooks, and
- be sympathetic around issues of affordability and rising costs of education.

However, faculty also expressed a range of concerns that reflect the perceived barriers to adoption and use of OER.

When asked to elaborate on their perceptions of barriers to adopting OER from the faculty perspective, stakeholders offered a wide variety of responses borrowing from some of the topics seen in the previous questions. Many provided more than one response.

Table 1
Barriers to OER adoption

Lack of time (11 respondents)	 For creating OER For maintaining OER For evaluating existing OER for quality and potential re-use
Professional considerations (10 respondents)	 Lack of recognition of OER work in tenure and promotion practices Contract or sessional faculty won't be paid for the work Younger faculty that seem the most interested in pursuing OER are also the ones most likely to be in contingent labour positions Inadequate or non-existent incentives and compensation Faculty do not often create their own additional learning materials in Canadian courses (unlike in Australia, NZ, UK,etc.) Less recognition for textbooks as publications (in comparison with research monograph or article), especially for pre-tenure faculty Concern that OER will be viewed negatively by colleagues Traditional values around control and usage of educational materials
Technology (7 respondents)	 Perceived lack of technology resources No consistent platform for creation and no central repository for work Lack of instructional design and technical support or lack of personal technical skills
Quality and Availability (6 respondents)	 Lack of ancillary materials Fear that adoption of OER may lead to a narrowing of perspective in some disciplines Concerns that others will adapt their OER to create resources of poorer quality Unsure how to find or evaluate the quality of an OER Commercial publications are perceived to be better quality and more current Difficulty adapting resources built with a specific use in mind

Copyright (3 respondents)	 Confusion about how to properly attribute or cite an OER Concern that open access will mean others will take their IP and earn revenue from it Not wanting colleagues or administrators to have access to their content Publishers have strong relationships with individual faculty who choose to use their materials rather than create their own Concerns about loss of revenue potential
Lack of awareness (3 respondents)	 Unsure how to find OER Unclear about where to get support on campus Not aware of the cost of textbooks and other materials assigned to students Feel paralyzed (i.e., unsure what steps to take to engage in this movement)

When asked, "What would encourage or facilitate creation and use of OER at your institution?" campus stakeholders identified the following top four approaches:

- providing faculty with technical infrastructure, technology or platforms to create quality OER (13 of 14 responses);
- education about OER and open education in general (12 of 14 responses);
- curating and hosting (10 of 14 responses); and
- support for evaluation and curation of OER materials (10 of 14 responses).

Role of libraries

Campus Stakeholders were asked for their views on the library's role in supporting OER activities on campus. The responses included:

- helping to promote resources for various disciplines and facilitate the improvement of OER:
- taking part in campus working groups to educate, advocate and devise a plan for supporting OER use and development;
- improving discovery of and access to OER;
- providing space in the library to create OER (inviting students and faculty); and
- raising awareness.

Provincial and consortial support

The final survey question for campus stakeholders asked how provincial organizations and ministries could offer OER support for OCUL institutions. OER funding was cited as a top priority, closely followed by access to technology or platform to create materials, with peer review and hosting both coming third.

When asked about priorities for consortial OER support, libraries' highest priority was for the development of an OER Toolkit for Libraries, closely followed by the establishment of a community of practice to help build competencies, and providing education to libraries.

Additional Findings

In the Fall and Winter of 2016-17, Scholars Portal and OCUL staff visited member institutions across the province as part of the Scholars Portal Roadshow. OER emerged as a strategic opportunity for a number of OCUL libraries during the roundtable discussions of local priorities and potential opportunities for Scholars Portal and OCUL support.

Some institutions saw potential for an OCUL or Scholars Portal collaboration to provide services and resources that might otherwise be beyond their capacity, such as support for training and outreach tools directed at faculty, and publishing and design support in conjunction with Scholars Portal's Open Monograph Press service. Discussions also identified potential campus partnerships such as the bookstore and student associations, and the integration of OER with institutional repositories, which are otherwise primarily focused on research output.

As a step towards knowledge sharing in this area, OCUL hosted an introductory webinar Open Educational Resources: Current Landscape on March 28, 2017, for attendees from Ontario college and university libraries. Speakers included experts from BCcampus, University of Victoria, ecampusOntario, Ontario College Library Service (OCLS), and Scholars Portal.

During the webinar, attendees were asked about potential roles for Ontario library higher education consortia in facilitating a community of practice around OER. The most common responses were:

- training and education, including a toolkit and/or research guides on OER;
- coordination of efforts across library consortia;
- development of best practices and standards;
- facilitating collaboration, resource sharing and access;
- building a community of practice through special events; and
- funding.

Projects and Services Spotlights

Several OER Working Group members consulted with colleagues across OCUL independently of the survey to provide highlights of OER projects from several OCUL institutions. These highlights are presented below.

University of Windsor - Partnership with the Office of Open Learning

The Leddy Library at the University of Windsor is partnered with the Office of Open Learning (OOL), which has received grants to design and implement four fully open modules, one fully open textbook, fourteen online courses, and four programs which will include thirty-three courses. The library has also been responsible for awarding internal grants to faculty to help create three programs (providing partial funding toward the development of twenty four courses), fifteen courses, one MOOC, and four teaching resources. In all of these instances, faculty are encouraged to use Open resources, which has helped lead to the creation of the fully open modules and a fully open textbook.

The OOL and library work together when needed to find resources for the courses and start with Open resources. In each case, the faculty member is asked to clearly articulate objectives for each lesson and resources are found to match with each specific objective, whether it is a textbook chapter, video, handout, or other such resource, in order to help with proper lesson planning.

Open materials are created with whichever platform best suits faculty needs and desired teaching outcomes. Platforms and authoring tools used include: Articulate, Blackboard (with various export options to other programs), Scalar, and Pressbooks.

University of Guelph - Student Survey on Textbook Costs

The University of Guelph Library, in conjunction with its Central Students Association, conducted a brief survey of undergraduate students in the Fall of 2016, to learn more about students' textbook purchasing behaviour and experiences. The four-question survey was administered in October, just after students had completed their textbook purchasing decision-making for the semester. More than 4000 students responded, submitting some 3200 comments which revealed a developing textbook crisis. Students indicated that they were increasingly opting not to purchase textbooks, predominantly due to the excessive cost, but that the decision not to purchase came with significant consequences, including impacts on learning and academic success, as well as social, emotional and health effects. Many of the issues identified by the students were specifically linked to the traditional textbook business model, and could be mitigated through the adoption of more affordable and accessible course resources, such as OER.

One of the interesting findings of the survey was that students are actually spending less on textbooks than was expected, presumably because they are opting not to purchase some or all of the textbooks required for their courses. In fact, 57% of the survey respondents reported that they had opted not to purchase a textbook at least once in their student career. When asked what they did instead, more than 70% of those students indicated that they tried to find an alternate means of accessing the required material – either by using a library copy, using a friend's copy, or downloading a (presumably pirated) copy from the Internet. Only 28% of respondents indicated that they opted just not to use the textbook at all. In the comments section, students noted other ways that they addressed the problem; some mentioned using an older edition, even though the paging was different, while some suggested they used a combination of approaches. One student even indicated that he had found it necessary to withdraw for the semester.

The UG survey also asked students how concerned they were about not having the required textbook. Eighty-seven per cent of the respondents indicated they were either "very concerned" or "somewhat concerned". And perhaps surprisingly, even those students who had found alternate means of accessing the textbook content reported moderate to high levels of concern with having decided not to purchase the required text. This suggests that the alternatives were not generally acceptable substitutes for having one's own purchased copy. When asked about the nature of their concerns, respondents reported a range of issues, from insufficient copies in the Library to meet the demand, to the inconvenience and embarrassment of having to borrow from a classmate, to worry about the potential copyright implications of using an illegal copy.

All of the respondents (i.e., those who always purchase required texts, as well as those who do not) were asked whether they felt there was a downside to not purchasing a textbook. Only 14% of respondents did not see a downside. For the remainder (86%), an overwhelming list of negative consequences were submitted via the comments section. Respondents noted that the textbook crisis contributed to copyright infringement and piracy, had negative impacts for students with disabilities, and also had significant impacts on student well-being and mental health.

Even those students who purchased textbooks reported concerns – either because of financial hardship directly related to the cost of the textbooks, or because of frustration and anxiety due to indirect causes. For example, students expressed anger when they had made a difficult choice to purchase a textbook which was subsequently only minimally used by the instructor, or when they purchased an e-textbook which they were prevented from retaining once the course was over. Also, it seems that some students who opt to purchase textbooks are sharing those texts with other students in the class in order to save on costs, a practise with its own set of challenges.

Carleton University - Planning for Blended Courses

At an ecampusOntario eLearning Seminar and Showcase held in January 2017, Patrick Lyons, the Director of Teaching and Learning at Carleton University, talked about the variance in costs in supporting conventional courses as opposed to online courses and the allocation of institutional funds towards the production and delivery of online learning materials. He stressed that many Carleton students prefer blended learning environments where they have opportunities to take online courses in conjunction with conventional classroom-based learning. Online courses are growing in numbers in order to meet the increasing demand, reducing institutional costs pertaining to facilities and maintenance which amount to roughly \$35/square foot. Lyons argued that university business plans for online learning need to incorporate startup costs for setting up new online courses and establish a protocol for channelling the savings from courses which might no longer be delivered in a conventional classroom.

Ryerson University - Open Authoring Guide

Ryerson University has been offering informational OER workshops since 2012, in partnership with the Learning and Teaching Office (LTO) and the Library. In June 2016 Ryerson adopted the open source publishing platform Pressbooks, and as the first project on the platform two librarians and a specialist in the LTO created the *Ryerson Open Textbook Authoring Guide*. This was developed to support faculty interested in creating OER at Ryerson. This work gives guidance on how to find OER, background on OER, how to adapt existing OER, how to create new OER, practical instructions on how to use Pressbook features and get an account at Ryerson, editorial guidelines, copyright issues, and accessibility considerations. This work was created in the free installation of the BCcampus Pressbooks open textbook plugin; however, Ryerson has purchased the ability to make the work available in downloadable formats including PDF.

Three works from BCcampus were adapted to create this work: *BC Open Textbook Authoring Guide*, *BC Open Textbook Adaptation Guide*, and *BC Open Textbook Accessibility Toolkit*. Tony Bates, an OER pioneer and a Visiting Professor at Chang School, Ryerson, wrote the Introduction for this work. Some material was adapted as needed, or new material was added to make the work more Ryerson-specific. The project was useful as it both provided a resource for the Ryerson (and the Ontario OER) community, and gave the Ryerson team some expertise on how to use Pressbooks and develop familiarity with the processes needed to create a collaborative OER work. This work was completed and made public in March 2017. A poster on the project was presented at OLA Superconference 2017.

This project also assisted librarians and the LTO in developing training skills in Pressbooks. By the end of March 2017, approximately 60 Ryerson faculty or staff have received hands-on training in the Pressbooks platform. The guide has also been useful in supporting the two author teams at Ryerson that were successful grant recipients in a recent eCampusOntario call for Open Textbook projects. The next stage of this project is to adapt the guide to support the entire Ontario community.

Recommendations / Opportunities

The OCUL OER Working Group recognizes the diversity of OCUL membership and the rapidly-changing OER environment in Ontario and beyond. A host of factors - including but not limited to library staffing, local expertise, budget, political considerations, size, student and faculty engagement - contribute to the complexity of the OER landscape on individual campuses, and all will need to be considered when moving forward with OER both individually and consortially. It is not expected that all of the recommendations in this section will be feasible for all libraries. However, there may be ways for OCUL to move forward as a consortium, or for individual libraries to complement or begin their own OER efforts.

These recommendations are based on responses to the survey, findings from other informal environmental scans, and the personal experience of working group members in the area of OER at their individual institutions.

Recommendations for OCUL

Technical infrastructure for hosting OER

The Ryerson University project team has recently completed the initial prototyping phase of their Open Publishing Infrastructure project, which was funded by ecampusOntario in order to expand the scope of the platform that currently hosts the Ontario open textbook library. There may be an opportunity to expand Ryerson's prototype infrastructure across the province, and for OCUL and Scholars Portal to play a role in doing so. Therefore, it is recommended that OCUL strike an exploratory committee to gauge interest, costs, and grant funding opportunities for the consortium in taking on this pivotal role.

Training

Due to the emerging expertise in OER among OCUL library staff, there is an opportunity for knowledge sharing. This can be accomplished through micro lessons, video-based learning, recorded lectures with accompanying slides, podcasts, and/or discussion boards to allow peer to peer learning for librarians across Ontario.

Many responses to the survey indicated that an OER startup kit for OCUL libraries would be a valuable resource. Developing such a kit could be accomplished through an OCUL working group, with resources provided by Scholars Portal.

Another useful resource suggested following the March webinar, is a "Voices of OER" webinar series that might be offered by OCUL in partnership with on-campus units to provide a platform for faculty (both within Ontario and beyond) to discuss their adoption of OER materials and how they are used in their classrooms. Having practical information from the faculty perspective could be beneficial to libraries that are partnering or hoping to partner with other units on campus, especially in the areas of education and outreach.

Sharing Resources

The OER Working Group has received several requests to develop models of campus collaborations to provide information to library directors who plan to set up OER working groups or who would like to get a better idea of how libraries participate in such groups on the university level. A shared inventory of skillsets, partners, and possible institutional models, could be useful for Directors and other library administrators across OCUL.

OCUL also has a potential role in facilitating the sharing of resources, such as instructional materials, that librarians and copyright specialists have already developed.

The Working Group recommends that a version of the white paper be published as an OER resource, inviting member schools to add resources and new content to develop a definitive OER Guide for Libraries. This would have the additional benefit of testing collaborative workflows and offering library staff a firsthand experience with OER creation and adaption.

Partnering

The examples of the OER Librarian Day events at Ryerson University and Centennial College libraries, and the newly-established Ontario OER Librarian listserv hosted at Ryerson, there are ways of sharing OER information across and outside of OCUL which may surface collaborative opportunities and common challenges in this area.

Several consortia in Canada and the US are investigating or recommending ways to assist their member libraries with OER, as discussed in the Landscape of OER section of this white paper. If OCUL proceeds with supporting OER consortially, forming partnerships with these consortia may allow for more long-term and wide-ranging support. Partnerships may also enable OCUL and/or its members to monitor and take advantage of emerging funding opportunities for open scholarship and increasing awareness of OER and OER repositories.

Recommendations for Institutions

Contextualizing and Evaluating

Survey responses indicate that much of the OER activity in Ontario colleges and universities is happening outside the library community and is being led by ecampusOntario, Creative Commons, and grassroots faculty and student efforts. It is important for libraries to effectively evaluate their current context on campus by identifying existing advocates, stakeholders, and funding to gain a better understanding of how to provide support without duplicating efforts already underway.

Information about faculty and disciplines already producing OER and how they are producing it, is helpful in evaluating how to allocate library staff and resources and to determine in what areas to develop staff competencies.

Once the library has found a role in the larger campus context, the next step is to establish clear library policies that provide guidance to staff, faculty and stakeholders looking for educational and technical support. To establish clear channels of communication, it may be helpful to nominate an OER lead/champion who can act as a liaison with other stakeholders on campus, including accessibility and online learning offices.

Educating and Advocating

Education and awareness emerged from the survey as areas where libraries could define roles for themselves in the "open" movement. One respondent suggested that the library engage in advocacy aimed at students, perhaps by helping student bodies partner with other campus units to run a #textbookbroke campaign or other awareness raising efforts.

Libraries are also well placed to:

- develop educational guides about Open Access and OER.
- assist in evaluating the effectiveness of OER with respect to learning outcomes,
- coordinate training opportunities for library staff (or even more widely throughout the university), and
- serve as a communications hub by disseminating information about training opportunities, listservs and other communication channels, and upcoming events which staff might be able to attend to learn more about OER.

One of the OCUL OER survey respondents framed their library's activity in the following way, reinforcing some of the recommendations for OCUL libraries,

"The library is leading this exploration because of its existing support for free [sic] access to online course readings, its scholarly publishing services and its interests in advancing open access and new forms of scholarly communications."

Future surveys could capture ongoing OER engagement and projects across OCUL institutions to evaluate the level of engagement and support which might be useful at the consortial level. While current responses indicate that some libraries are not engaged in this work, the landscape is rapidly changing, due in part to the proactive outreach and financial support for projects provided by ecampusOntario.

Open Educational Resources: A Primer

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Definition of OER

Defined by UNESCO in its 2012 Paris Declaration, Open Educational Resources (OER) include:

...teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work (UNESCO, 2012).

OER have also been defined as teaching and learning materials that are freely available online for everyone to use, whether they are instructors, students, or self-learners. Examples of OER include, but are not limited to, full courses, course modules, textbooks, syllabi, lectures, homework assignments, quizzes, lab and classroom activities, pedagogical materials, games, and simulations (McGill, 2010).

The Five Rs

As indicated by the UNESCO definition of OER, the concepts of reuse and adaptation are important when considering these resources. David Wiley (2014) lists "5Rs" of openness that are helpful in this context:

Retain - make, own and control

Reuse - use content for any purpose

Revise - adapt, adjust or modify

Remix - combine original or revised content with other open content to make new content

Redistribute the remixed work under similar license

The Benefits

In his opening remarks at the OER Librarian Day at Ryerson University Library (March 30, 2017), David Porter, CEO of ecampusOntario, listed five benefits of open education:

- 1. Formalized legal access to free learning resources,
- 2. Customized resources which improve learning,
- 3. Opportunities for authentic learning which is socialized / team based (e.g., Chemistry e-textbook),
- 4. Collegial collaboration in activities such as textbook sprints (e.g., <u>The Great Psychology Textbank Sprint</u>), and
- 5. Demonstration of the service mission of the institution (Porter, 2016).

Further discussion around these principles and the copyright and licensing considerations when repurposing existing works are discussed in greater detail in the <u>Landscape of OER section of</u> this white paper.

OER and Post-Secondary Teaching and Learning

The North American university system is based on the European model developed during the medieval times. It was, and has been, an institution that served as "bastions of ideas, repositories of knowledge, and training grounds for intellectuals" (Summerlee & Hughes, 2010). A major change to this format occurred in the 19th century with the idea of using the university, and, essentially, all post-secondary education (PSE), for "nation building" and for conducting research in support of 'national development and industrialization' (Summerlee & Hughes, 2010). The last major change occurred in the mid-1900s as budgets for PSE became more and more of an issue, causing PSE leaders to approach PSE as a business model. This has also caused some students to treat their education in the business model, focusing on job attainment and looking for a return on investment through higher future earnings (Pelikan, 1992).

In this new information age, where information is so widely available and easily accessible on the internet, employers have been expressing dissatisfaction with the "output" of students. They are seeking employees who can think critically and creatively, communicate effectively, work collaboratively, solve complex problems, understand issues from multiple and global perspectives, manage themselves along with tasks and others, and provide leadership for innovation and change (Summerlee & Hughes, 2010).

In order to meet this need and remain competitive for enrollment, PSEs have been focusing on student-centered learning, moving from the "sage on the stage" to the "guide on the side" and the "meddler in the middle." This has taken form in many ways, from understanding effective pedagogical practices in lesson planning to re-framing flexible programming of courses, such as online, hybrid, and traditional face-to-face formats (Hunt & Chalmers, 2013).

The "flipped classroom" is a concept that also allows students to engage with rich resources like podcasts and videos before the class in order to create a more engaging way to interact with content, minimizing class time spent on information delivery. This also supports those who have accessibility needs, allowing students to engage with content in their own time.

The transition towards blended learning or an exclusively online learning environment provides an opportunity for faculty to think about their courses in a new context. The overall objectives and desired outcomes are always important but with a new format there is an opportunity for reevaluation of instructional design and teaching materials.

With the use of OER, instructors are encouraged to focus on the course as a whole and each individual lesson. Since an OER may come in any form, instructors may use one or more chapters from several textbooks to make up their own textbook, but are also encouraged to use videos, handouts, games, or other lesson plans that are considered open in order to meet the objectives of each lesson. This allows faculty to go beyond the use of textbook-only resources in the classroom and encourages faculty to create non-textbook OER that optimizes student learning.

Timeline of OER Activities in North America

In **2001**, the Massachusetts Institute of Technology established <u>MIT Open Courseware</u>, a project meant to openly license course materials and lectures for all undergraduate and graduate courses at MIT. Since its establishment, over 2000 courses have been made openly available.

In **2011**, two of the first faculty-incentive mini grant programs were established in the United States. <u>Temple University's Alternative Textbook Project</u> (now titled Textbook Affordability Project) has saved Temple students over \$500,000 in textbook costs by distributing \$500 minigrants to faculty. <u>University of Massachusetts - Amherst's Open Education Initiative</u> has saved students over \$1.6 million by providing grants of as little as \$500 for adoption of OER, to up to \$10,000 for the creation of OER.

In **2012**, after several successful years of OER development, the <u>BC Open Textbook Project</u> became Canada's first publicly-funded project of its kind. In addition to providing a platform for open textbooks in various subjects, this initiative also provides support for instructors to "adopt" and "adapt" material by making use of the Creative Commons license used to create the OER. The project is managed by <u>BCcampus</u>, a provincial organization that supports all B.C. post-secondary institutions, and is jointly funded by the B.C. government and the Hewlett Foundation.

In **2012**, OpenStax - a nonprofit based out Rice University - published its first peer-reviewed open textbook, complete with lesson plans, test banks, and a faculty edition. Since its inception, OpenStax has published more than 20 peer-reviewed textbooks

In **March 2014**, the <u>Memorandum of Understanding Open Educational Resources</u> was signed among the governments of BC, Alberta and Saskatchewan, pledging each province to "collaborate on the development of common Open Educational Resources", including identifying and fostering best practices.

In **Summer 2014**, the Canadian Association of Research Libraries (CARL) distributed a survey to its members related to the adoption of open textbooks at their respective institutions. Nine out 31 members responded to the survey, some indicating that libraries were involved in the production of open texts. In **September 2014**, a paper titled "Open textbooks: opportunities for research libraries" was delivered to the CARL Committee on Research Dissemination. This paper drew on the survey findings as well as a broader environmental scan and defined OER, flagged its economic value, and enumerated barriers to greater adoption such as "quality control and content vetting; IT infrastructure; intellectual property; business models and interoperability" (CARL, 2014, p.3). The importance of advocacy and faculty incentives, the need for critical mass, the value of developing ancillary materials, and sustainable business models were cited as important issues contributing to the widespread adoption of OER.

In **June 2016**, the Ontario College Heads of Libraries and Learning Resources' (HLLR) Digital Learning and OER Committee produced a report called "Online Learning, OERs and the Changing Role of College Libraries". This report indicates that many academic libraries see OER as an extension of existing faculty liaison activities "under the auspices of scholarly communication" (Infotrova Research Services Canada, 2016, p.3).

In **July 2016**, <u>Spec Kit 351</u> was published by the Association of Research Libraries; it focused on implementation, governance, and funding around OER; incentives for faculty participation; and the types of affordable/open course content that have been developed.

In **December 2016**, the <u>Orbis Cascade Alliance's OERs Working Group</u> released a survey designed to evaluate the current landscape of library consortia engagement with OER as a part of their environmental scan for a similar research paper to this one. The working group report was published in June 2017.

The first round of eCampusOntario grants for open content funding including textbooks and open modules were awarded in the Fall of 2016 for projects commencing January 2017 and ending in March 2018. (Previously COU had funded some open modules in 2014 - 2016.) In **February 2017**, eCampus announced the results of the 2016 - 2018 Call for Proposals which included grants to support <u>Open Content Creation</u>, <u>Program Development</u> and <u>Research and Innovation</u> projects in colleges and universities. These grants stressed that material would be licensed under Creative Commons licenses, and emphasized a desire to foster collaborative partnerships across institutions.

The grants are supporting the development of:

- thirteen open learning modules and 10 open textbook projects;
- twenty-five new post-secondary open programs and courses; and
- forty-five projects related to online and technology enabled learning in six key theme areas: pedagogical approaches, quality and evaluation, business models, openness, connecting programming with labour market needs, and accessibility and digital literacy.

(A full list of funded projects is available at https://www.ecampusontario.ca/funding/.)

Also in **March 2017**, the HLLR OER committee hired a consultant to produce an Ontario College Libraries OER toolkit. Due for release later in 2017, the toolkit will repurpose and remix high-quality open content, and then add original content to fill in any gaps in resources. This multi-format toolkit will explore topics related to pedagogy, copyright and permissions, finding and curating open content, building curriculum with OER, evaluating resources for quality, advocating for use of OER, training, and building a sustainable community of practice.

On **March 27, 2017**, Open Education Ontario hosted its <u>first Summit at OCAD University</u>, attracting attendees from Ontario universities and colleges campuses including online learning specialists, copyright and instructional design staff. During this all day event, attendees heard

from OER experts and faculty about the growing momentum around open education, practical pedagogy and copyright considerations.

On **March 28, 2017**, OCUL organized the introductory <u>Open Educational Resources: Current Landscape</u> webinar with speakers from BCcampus, eCampusOntario, Ontario colleges and Scholars Portal, inviting attendees from Ontario colleges and universities.

Ryerson University hosted an OER Librarian Day on **March 30, 2017**, in order to bring together librarians from both the university and college sectors to learn about Open Education and to explore ways to support OER initiatives at their own institutions. This event included speakers from BCcampus, eCampusOntario, Ontario colleges and universities, and Scholars Portal. The day concluded with a demonstration of Pressbooks open source publishing software. As a result an Ontario LIBOER listserv was created and moderated by Ann Ludbrook, Copyright and Scholarly Engagement Librarian at Ryerson University Libraries, https://groups.google.com/a/ryerson.ca/forum/#!forum/onoer

In **May 2017** eCampusOntario announced it would partner with Ryerson University to build a prototype for open publishing infrastructure in Ontario. This prototype project will design and assemble an open education publishing infrastructure to extend the capabilities of the existing Ontario Open Textbook Library launched in June 2017. During this project, the Ryerson team consulted with various stakeholders, including OCUL, by means of informal conversations and also in-person meetings such as the Usability Day held on **August 11**, **2017**. The release of the publishing infrastructure prototype and project report is anticipated for Fall 2017.

eCampus launched its <u>Open Textbook Library</u> on **June 6, 2017** which was announced by the Minister of Minister of Advanced Education and Skills Development, Deb Mathews. The new platform contains 180 materials migrated from the BCcampus open textbook platform and will continue to grow through continued creation of resources funded by eCampus. eCampusOntario is partnering with the University of Waterloo to support the Ontario Open Textbook Library with a print on demand service for the province.

On **June 8, 2017**, Centennial College hosted a follow up OER Librarian Day for library staff from Canadian colleges and universities. The focus of this day was to advance discussions held at Ryerson in March and to facilitate an opportunity for attendees to take part in creating a series of OER resources on a number of pressing topics ranging from awareness and promotions, to faculty support and copyright issues. A <u>full recording of this day is available</u>.

On **September 5**, **2017**, the first Connect OER Annual Report (2016-17) was released by SPARC. Among its key findings this report showed that libraries are the campus entities most actively engaged in OER activities, and within libraries, these efforts are most often led by Scholarly Communications departments. Additionally, this report estimated that SPARC member institutions saved students over \$5 million in textbook costs over the 2016-17 academic year (Yano, 2017).

On **September 27, 2017,** the <u>Affordable College Textbook Act</u> was introduced by Representatives Polis (D-CO) and Sinema (D-AZ) in the United States House and Senators Durbin (D-IL), Franken (D-MN), and King (I-ME) in the United States Senate. If successful, the legislation will create a grant program to support universities and colleges in piloting programs that will encourage the use of open textbooks (SPARC, 2017). This legislation was previously introduced in the 113th Congress (2013-15) and 114th Congress (2015-17), but did not advance.

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Appendix A: Orbis Cascade Survey, December 2016

Thank you for completing this short survey on the role(s) of library consortia in Open Educational Resources (OERs). This survey is being run by a working group at Orbis Cascade Alliance—a consortium of 39 colleges and universities in Oregon, Washington, and Idaho. We are seeking information about the roles libraries and library consortia are currently assuming in open education. Ultimately, this survey will inform recommendations that we make to our own consortium about how it can best serve its member institutions in this area.

As a little context - for the purposes of this survey, we are defining open educational resources as "teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others" (Hewlett Foundation).

Your first and last name?

The consortium that you represent?

What role(s) does your organization fill regarding open educational resources (OERs)?

- Providing education to librarians regarding OERs
- Facilitating discovery of OERs at member institutions
- Curation or hosting of OERs
- Reviewing or editing of OERs
- Providing funds to member institutions to facilitate review, adoption, and/or creation of OERs
- Other:

Please describe what role you see for library consortia involvement in OERs, now or in the future. We'd appreciate as many specifics as possible.

Your answer

May we contact you in the future with follow-up questions?

- Yes
- No

Appendix B: OCUL Survey on OER, May 2017



Survey on Open Educational Resources (OER)

12 May 2017

Ontario Council of University Libraries (OCUL) is a consortium of Ontario's 21 university libraries providing its membership with collective purchasing and shared digital information infrastructure, collaborative planning, advocacy, assessment, research, partnerships, communications, and professional development. The OCUL Board is composed of the Directors of the 21 OCUL member libraries.

In response to increasing membership interest, OCUL is undertaking work on a white paper on the topic of Open Educational Resources (OER). This research is intended to investigate opportunities in the rapidly growing area of open learning materials.

This survey was developed to assist the research team with conducting a broader university-wide environmental scan to capture ongoing OER initiatives across OCUL institutions. All responses will be treated confidentially. Responses will be evaluated, anonymized, and distributed to the OCUL Library Directors.

Definition

For the purposes of this research, the following definition of Open Educational Resources (OER), has been adopted:

Defined by UNESCO in its 2012 Paris OER Declaration, OER are: teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work.

Submission Information

OCUL Directors are asked to submit this document with your comments to Anika Ervin-Ward (anika.ervin.ward@ocul.on.ca) by June 12, 2017. Questions about the survey may be directed to Anika at any point.

Format

As OER activities can be quiet nascent and a bit fragmented on many campuses, this survey represents an opportunity for information gathering to establish a holistic overview of university activities in this area.

Thus, there are two sections to the survey:

- Section 1: Questions for Libraries—To be completed by the University Library Director (or equivalent) or a person designated by the Library Director
- Section 2: Questions for OER Stakeholders—To be completed by those at the university who
 have responsibility for or are involved in open educational resources (OER). The Stakeholder
 Section may be completed more than once, e.g., by the Teaching and Learning Office, the
 Administration Office, or the Technology Office. You may wish to engage with the stakeholder(s)
 to help them complete this portion of the survey.

Thank you very much for taking the time to respond to this survey.

Section 1: Questions for Libraries

c. It's in the works

To be completed by University Librarian or designate

Please provide	the name of your institution:
Please identify	your institutional role:
Can the resear	ch team follow up with you following this survey?
0	Yes (Please provide your email address:) No
1. What o	does your library do in support of OER at this time? Select all that apply:
a.	Advocacy aimed at faculty and educational materials on how to create OER, which includes evaluation of existing tools and resources
b.	Advocacy aimed at students and evaluating effectiveness of OER with respect to learning outcomes
C.	We have research guide(s) dedicated to the topic of open access educational resources
d.	We have a working group tasked with evaluating the role of our library in creating or housing OER
e.	The library does not do anything at the moment (Please provide details on your library's position:
f.	Other (Please specify:)
2. Does y	our library have an OER policy?
a.	Yes (Please provide link to policy:)
b.	No

3.	Who is responsible for providing technical support with regard to OER on your campus? Select all that apply:		
	a.	My library	
	b.	Open or Online Learning Offices	
	c.	Teaching & Learning Offices	
	d.	Computing & Communications	
	e.	Other (Please explain:)	
4.	If the li	brary provides technical support, which tools do you use?	
5.	Who at	your university provides educational support with regard to OER? Select all that apply:	
	a.	My library	
	b.	Open or Online Learning Offices	
	C.	Teaching & Learning Offices	
	d.	Student groups	
	e.	Other (Please explain:)	
6.	What f	unding sources are available on your campus with regard to OER initiatives?	
7.	Does y	our library take part in university-wide OER initiatives or committees?	
	a. b. c.	Yes (Please provide details:) No Not sure	

8.	What role do you see OCUL playing in supporting your institution in the area of OER? Select all that apply:		
	a.	Providing education to librarians regarding OER	
	b.	Developing advocacy and awareness tools for faculty in the area of OER	
	c.	Providing access to technology or platforms to create quality OER	
	d.	Curating or hosting of OER materials	
	e.	Providing support with regard to evaluation of OER for quality and content	
	f.	Providing support and project management for updating OER content	
	g.	Providing resources with regard to OER funding opportunities	
	h.	Creating a community or other forum to share expertise among OCUL schools	
	i.	Developing a model OER policy that institutions could adopt	
	j.	Developing an OER toolkit for libraries	
	k.	Other (Please specify:)	

9. Did we forget to ask something?

Thank you very much for taking the time to respond to this survey.

Section 2: Questions for OER Stakeholders

To be completed by those at your university who have responsibility for or are involved in open educational resources (OER).

Note: This survey can be completed by more than one unit at each university, as appropriate. The

university librarian or designate may wish to complete in conjunction with the stakeholder. Examples of stakeholders may include Teaching and Learning offices, Information Technology

offices	s, and University Administration, among others.
Please provide	the name of your institution:
Please identify	your institutional role:
Can the resea	rch team follow up with you following this survey?
0	Yes (Please provide your email address:) No
1. What	does your office do in support of OER at this time? Select all that apply:
a.	Technology access and training workshops
b.	Access to internal and external grants
c.	Policy support
d.	Advocacy aimed at faculty and educational materials on how to create OER, which includes evaluation of existing tools and resources
e.	Advocacy aimed at students and evaluating effectiveness of OER with respect to learning outcomes
f.	We have research guide(s) dedicated to the topic of open access educational resources
g.	We have a working group tasked with evaluating the role of various campus stakeholders in creating or housing OER
h.	We provide access to a dedicated OER technologist

i. Other (Please specify:

2.	Does your office/department have an OER policy?	
	a.	Yes (Please provide link to policy:)
	b.	No
	C.	It's in the works
3.		unding sources are available across your institution towards the development of OER? list all that are applicable and include monetary values and sources where known.
4. How many faculty have created or published OER at your institution? Please prinformation as you can.		any faculty have created or published OER at your institution? Please provide as much ation as you can.
	a.	0
	b.	1-5
	c.	6-10
	d.	10-20
	e.	21 or more
	f.	Unknown
5.	How m	any courses use OER at your institution?
	a.	0
	b.	1-5
	c.	6-10
	d.	10-20
	e.	21 or more
	f.	Unknown
6.	-	experience, are there particular disciplines that tend more toward using OER?
	a.	Yes (Please provide details)
	b.	No
	c.	I'm not sure

7.	Why do	you think these disciplines use OER more than others?	
8.	What h	ave you observed about how faculty feel about OER?	
9.	What are your perceptions of barriers to creating OER from the faculty perspective? (For example, this could include, but is not limited to, lack of recognition of OER work in tenure and promotion practices, lack of technology resources, insufficient course release time for OER development, etc.)		
10.	-	opinion, what would encourage or facilitate creation and use of OER at your institution? all that apply:	
	a.	Providing education with regard to OER and open education in general	
	b.	Developing advocacy and awareness tools for faculty, staff, and students to encourage buy-in of OER	
	c.	Providing access to technology or platforms to create quality OER	
	d.	Partnering with the library providing support in this area	
	e.	Curating or hosting of OER materials	
	f.	Providing support with regard to evaluation of OER for quality and content	
	g.	Providing support and project management for updating OER content	
	h.	Providing support with regard to peer review process for existing and new OER content	
	i.	Providing OER funding opportunities	
	j.	Creating a community or other forum to share expertise across universities	
	k.	Developing a model OER policy that institutions could adopt	
	I.	Developing an OER toolkit for faculty or students	
	m.	Other (Please specify:)	

11.	11. Is there something that your university library could do to facilitate creation and use of OER at your institution?		
12.	2. Which provincial organizations and ministries do you work with/are you aware of that are engaged in OER support? Select all that apply:		
	a.	Council of Ontario Universities (COU)	
	b.	Ontario Council of University Libraries (OCUL)	
	c.	Ontario Universities' Council on E-Learning (OUCEL)	
	d.	ecampusOntario	
	e.	Ontario Research and Innovation Optical Network (ORION)	
	f.	Other (Please specify:)	
13.		ole do you see provincial organizations and ministries playing to support OER at your cion? Select all that apply:	
	a.	Providing education with regard to OER and open education in general	
	b.	Developing advocacy and awareness tools for faculty, staff, and students to encourage buy-in of OER	
	c.	Providing access to technology or platforms to create quality OER	
	d.	Curating or hosting of OER materials	
	e.	Providing support with regard to evaluation of OER for quality and content	
	f.	Providing support and project management for updating OER content	
	g.	Providing support with regard to peer review process for existing and new OER content	
	h.	Providing OER funding opportunities	
	i.	Creating a community or other forum to share expertise across universities	
	j.	Developing a model OER policy that institutions could adopt	
	k.	Developing an OER toolkit for faculty or students	

I. Other (Please specify: ______)

14. Did we forget to ask something

Thank you very much for taking the time to respond to this survey.