

A Report on the Capacity of Ontario's Post-Secondary Institutions to Support Open Educational Practices

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The Inclusive Education Research Lab is a research laboratory at Brock University that investigates open educational practices, inclusive teaching, and ethical approaches to educational technologies. We believe that higher education achieves its transformative potential when it ensures equitable access, supports inclusion, fosters belonging, and is designed for justice, especially for students and scholars from historically, persistently, or systemically marginalized groups.



eCampusOntario is a not-for-profit organization funded by the Ontario Ministry of Colleges and Universities that supports innovation, collaboration and education in Ontario's colleges, Indigenous institutes, and universities. eCampusOntario provides the sector with platforms, programs and services to advance digital transformation in postsecondary education. One of our strategic priorities is supporting the adoption of Open Educational Resources (OER) via the Open Library, the largest repository of OER in Canada.

// Acknowledgements

We are grateful to Lara Martin and Rakha Zabin from Brock University and Jason Northway-Frank, Lutfiyya Dhalla, and Cindy Ly from eCampusOntario for their contributions in support of this project.

The research outlined in this report was supported by an Insight Development Grant from the Social Sciences & Humanities Research Council of Canada.



Social Sciences and Humanities Research Council of Canada Conseil de recherches en sciences humaines du Canada





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Executive Summary

This report shares results and recommendations from a study of the capacity of Ontario's public post-secondary institutions to support open educational practices (OEP).

The report begins with a brief overview of open education, including the educational benefits of using OEP. It emphasizes Canada's leadership with open educational resources (OER), particularly within British Columbia and Ontario, considers opportunities and challenges for francophone OER, and reflects on the rapid growth in recent years of institutional OEP initiatives.

The report chronicles the development and deployment of the Institutional Self-Assessment Tool, Version 2 (ISAT2), the research instrument used in this study, including with an overview of its 22 dimensions organized within the following six groupings: 1) vision and implementation, 2) partnerships, 3) policies, incentives, and professional development, 4) institutional supports, 5) leadership and advocacy, and 6) culture change.

Detailed results are presented from the online survey of Ontario's colleges, universities, and Indigenous institutes. The overall response rate was 40%, with variations based on type of institution. Dimensions of support for OEP where institutions demonstrate stronger capacity include internal partnerships with the Library and Centre for Teaching and Learning and technological or other infrastructural support. Conversely, dimensions of support for OEP where institutions demonstrate weaker capacity include leadership structure, student partnerships, incentives or rewards, research support, curriculum integration, and policy.

Differences between the types of institutions are also considered. Overall, colleges reported having developed greater capacity and more mature supports for OEP. This includes greater integration of OEP with institutional visions, greater implementation of action plans, more sophisticated internal and external partnerships, more professional development, more dedicated staff positions, greater uptake of available resources, and more advocates who are administrators and faculty. Universities reported more advanced supports when it came to institutional policies, open access scholarship, communication channels, and formalized leadership structure. Finally, responding Indigenous institutes reported somewhat greater implementation of action plans and stronger external partnerships than either colleges or universities, albeit with less technology and other infrastructure support. However, unique considerations for Indigenous institutions seeking to embrace OEP are emphasized, including those pertaining to Indigenous knowledge and intellectual property.

The report closes with a set of 10 practical recommendations for institutions seeking to advance their capacity to support OEP. This includes specific steps concerning strategic planning, leadership, partnerships, encouragement of educators, investment in staff, funding, systems integration, communication, research, and collaboration.

Background and Context



Open Education Overview

Open education is a philosophy about the way people produce, share, and build on knowledge. Proponents of open education believe everyone in the world should have access to high-quality educational experiences and resources, and work to eliminate barriers to this goal, whether these are high monetary costs, outdated or obsolete materials, or legal mechanisms that prevent or inhibit collaboration among scholars and educators.1 With origins in open and distance learning, open education aligns closely with open scholarship and open science and emphasizes student-centered and constructivist teaching methods aimed at reducing educational costs, promoting open sharing of knowledge, and democratizing knowledge creation.2

Open educational practices (OEP) often centre on the use of open educational resources (OER), which are learning, teaching, and research materials available in various formats that are either in the public domain or released under an open (e.g., Creative Commons) license that permits no-cost access, re-use, re-purpose, adaptation and redistribution by others.³ This may include textbooks, articles, interactive simulations, videos, images, and other learning objects. OER empowers educators with greater pedagogical flexibility, enabling them to customize course materials without the restrictions of traditional copyright, while ensuring that learners can enjoy immediate, cost-free, and unfettered access to required course materials. In the two decades since the publication of the Creative Commons licenses in 2001 there has been an exponential rise in the number of OER shared freely by creators around the world. In total, there are now more than 2 billion pieces of content that have been freed from the restrictive terms of traditional copyright through the application of Creative Commons licenses.⁴

Open educational practices also encompass the embrace of open pedagogy, collaborative teaching practices that may draw on OER but that also invite students to co-create the learning experience.⁵ Open pedagogy may therefore be understood as both an access-oriented commitment to learner-driven education and a process of designing architectures and using tools for learning that enable students to shape the public knowledge commons of which they are a part.⁶ This may, for example, include students creating OER as part of

- 1 Jhangiani, R.S., and Biswas-Diener, R., (2017). *Open: The philosophy and practices that are revolutionizing education and science*. Ubiquity Press. https://www.ubiquitypress.com/site/books/e/10.5334/bbc/
- Inamorato Dos Santos, A. (2019). Practical guidelines on open education for academics: Modernising higher education via open educational practices. Publications Office of the European Union. https://publications.jrc.ec.europa.eu/repository/handle/JRC115663
- 3 UNESCO. (2019). *Recommendation on open educational resources (OER)*. https://www.unesco.org/en/legal-affairs/recommendation-open-educational-resources-oer
- 4 State of the Commons 2022 by Creative Commons is licensed via CC BY 4.0. https://creativecommons.org/2023/04/11/state-of-the-commons-2022/
- 5 Cronin, C. (2018). Openness and praxis: A situated study of academic staff meaning-making and decision-making with respect to openness and use of open educational practices in higher education. National University of Ireland. https://aran.library.nuigalway.ie/handle/10379/7276
- DeRosa, R., & Jhangiani, R. (2018). Open pedagogy. In E. Mays (Ed.), *A guide to making open textbooks with students*. Rebus Community. https://press.rebus.community/makingopentextbookswithstudents/chapter/openpedagogy/

their coursework via the design of "renewable assignments"⁷ (often using open educational technologies and platforms such as Wikipedia, WordPress, H5P, or Hypothes.is) that have a larger audience, longer life, and greater impact than traditional "disposable" assignments. It may also involve the provision of greater agency to learners through, for example, the co-creation of course policies or schedules of work.

Educational Benefits of OEP

Surveys of students at universities in British Columbia and Ontario have shown that a majority of post-secondary students go without purchasing all of their required textbooks and that many students even select or drop courses on the basis of textbook costs. 89 These unfortunate

choices are disproportionately made by first generation students, students of colour, and those from disadvantaged socioeconomic backgrounds, further exacerbating problems such as food insecurity.¹⁰ ¹¹ In this context, the use of OER creates significant cost savings for students, especially when this displaces the costs associated with purchasing or leasing expensive commercial textbooks.¹²

Beyond cost savings, the most valuable benefits of using OER may pertain to educational outcomes, as empirical studies across different national and institutional contexts have consistently demonstrated that students enrolled in courses using OER perform equally well or even better than those using commercial textbooks.¹³ ¹⁴ ¹⁵ ¹⁶ Interestingly, gains in student performance and persistence from using OER appear to accrue disproportionately

- 7 Seraphin, S. B., Grizzell, J. A., Kerr-German, A., Perkins, M. A., Grzanka, P. R., & Hardin, E. E. (2019). A conceptual framework for non-disposable assignments: Inspiring implementation, innovation, and research. *Psychology Learning & Teaching*, 18(1), 84-97. https://doi.org/10.1177/1475725718811711
- 8 Jhangiani, R. S., & Jhangiani, S. (2017). Investigating the perceptions, use, and impact of open textbooks: A survey of post-secondary students in British Columbia. The International Review of Research in Open and Distributed Learning, 18(4). https://doi.org/10.19173/irrodl.v18i4.3012
- 9 Versluis, A., Martin, H., Ward, R., Green, N., Cheskes, R., & Cassidy, M. (2017). #TextbookBroke: Findings of a University of Guelph student survey on textbook purchasing behaviours and outcomes. https://atrium.lib.uoguelph.ca/items/12d2a277-ddb9-4702-a5e5-9380a91a20f8
- 10 Correa, E., & Bozarth, S. (2023). To eat or to learn? Wagering the price tag of learning: Zero cost textbook degree. Equity in Education & Society, 2(2), 126-137. https://doi.org/10.1177/27526461231154013
- 11 Dubick, J., Mathews, B., & Cady, C. (2016). *Hunger on campus: The challenge of food insecurity for college students*. https://studentsagainsthunger.org/wp-content/uploads/2016/10/Hunger_On_Campus.pdf
- 12 Allen, N. (2018). \$1 billion in savings through open educational resources. SPARC. https://sparcopen.org/news/2018/1-billion-in-savings-through-open-educational-resources/
- 13 Clinton, V. & Khan, S. (2019). Efficacy of open textbook adoption on learning performance and course withdrawal rates: A meta-analysis. *AERA Open, 5*(3). https://doi.org/10.1177/2332858419872212
- 14 Hendricks, C., Reinsberg, S.A., and Rieger, G. (2017). The adoption of an open textbook in a large physics course: An analysis of cost, outcomes, use, and perceptions. *International Review of Research in Open and Distributed Learning*, 18(4). https://www.irrodl.org/index.php/irrodl/article/view/3006/4220
- 15 Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational technology research and development*, 64, 573-590. https://doi.org/10.1007/s11423-016-9434-9
- 16 Jhangiani, R. S., Dastur, F. N., Le Grand, R., & Penner, K. (2018). As good or better than commercial textbooks: Students' perceptions and outcomes from using open digital and open print textbooks. *Canadian Journal for the Scholarship of Teaching and Learning*, 9(1). https://doi.org/10.5206/cjsotl-rcacea.2018.1.5

in favour of marginalized student populations, 17 which adds to the evidence that the use of OER can serve as a form of redistributive justice in which resources are reallocated to those who by circumstance have less. 18 This is especially true when OER is adopted at scale and learners are able to enrol in courses or even entire program pathways that are marked as using OER or carrying zero required textbook costs.19

Alongside OER, a growing number of educators are embracing open pedagogy. 20 Although research on open pedagogy is still emerging, early findings appear to point to higher levels of student motivation and engagement, 21 along with a greater perception among students that the learning experience is valuable, rewarding, and enjoyable. 22 Similarly, faculty perceptions of this approach reference greater student engagement, improved quality of student work, and a positive change in the dynamic between students and instructors.23



- 17 Colvard, N. B., Watson, C. E., & Park, H. (2018). The impact of open educational resources on various student success metrics. International Journal of Teaching and Learning in Higher Education, 30(2), 262-276. http://files.eric.ed. gov/fulltext/EJ1184998.pdf
- 18 Lambert, S. R. (2018). Changing our (dis) course: A distinctive social justice aligned definition of open education. Journal of Learning for Development, 5(3). https://doi.org/10.56059/jl4d.v5i3.290
- 19 Griffiths, R., Mislevy, J., Wang, S., Ball, A., Shear, L., & Desrochers, D. (2020). OER at scale: The academic and economic outcomes of Achieving the Dream's OER degree initiative. SRI International. https://achievingthedream. org/oer-at-scale-the-academic-and-economic-outcomes-of-the-oer-degree-initiative/
- 20 Clinton, V. (2021). Open pedagogy: A systematic review of empirical findings. Journal of Learning for Development, 8(2), 255-268. https://doi.org/10.56059/jl4d.v8i2.511
- 21 Clinton-Lisell, V., & Gwozdz, L. (2023). Understanding student experiences of renewable and traditional assignments. College Teaching, 71(2), 125-134. https://doi.org/10.1080/87567555.2023.2179591
- 22 Ashman, M. (2023). Faculty and student perceptions of open pedagogy: A case study from British Columbia, Canada. The Open/Technology in Education, Society, and Scholarship Association (OTESSA) Journal, 3(2), 1-29. https://doi.org/10.18357/otessaj.2023.3.2.40
- 23 Paskevicius, M. and Irvine, V. (2021). Theoretical and methodological approaches for investigating open educational practices. The Open/Technology in Education, Society, and Scholarship Association Journal, 1(2), 1-19. https://doi.org/10.18357/otessaj.2021.1.2.11

Canada's Leadership in OER

For over ten years, Canada has been a global leader in OER usage. This began in British Columbia, where the BC Open Textbook Project was launched in 2012 with a \$1 million investment from the Ministry of Advanced Education. This project aimed to create, adapt, and harvest openly licensed textbooks for the 40 highestenrolled undergraduate courses in the province. An additional \$1 million was later allocated to develop 20 open textbooks for trades and technology training. More than a decade later, the BC Open Collection²⁴ hosts 350 open textbooks, 19 course packs, and 849 other course materials that have been adopted across 43 institutions by over 1000 faculty members, saving over 338,000 students nearly \$40 million.25 This includes OER adoptions at institutions such as Kwantlen Polytechnic University that have developed numerous zero textbook cost (ZTC) degree programs.26

Ontario has also made significant investments in OER development, notably \$1 million in June 2017 followed by \$35 million of the \$70 million investment from the Ontario Ministry of Colleges and Universities (MCU) in the Virtual Learning Strategy, from 2020-21 to 2023-24. OER use in Ontario is significant: 98% of eCampusOntario's 53 member institutions report OER adoption by 18,411 faculty and staff across the province, impacting a total of over 303,000 learners across the globe. This generates significant savings for

learners - \$26,479,832 and counting to date, although this number relies on self-reporting of OER adoption and is therefore likely a conversative estimate of actual savings for learners. The eCampusOntario Open Library currently houses 1811 resources and 7170 shareable activities in its H5P Studio, and 30 of 53 members have federated the Open Library to their library systems. The reach of the Open Library is global with nearly every country reporting adoptions.27

Beyond British Columbia and Ontario, coalitions of post-secondary institutions, educators, librarians, and students have worked to raise awareness, develop supports, and engage in advocacy for OER across Canada, including through regional initiatives such as AtlanticOER²⁸ and Alberta OER Community of Practice,29 as well as national organizations such as the Canadian Association of Research Libraries - Association des bibliothèques de recherche du Canada (CARL - ABRC), and the Canadian Alliance of Student Associations - Alliance canadienne des associations étudiantes (CASA - ACAE).

In 2023, OER practitioners and advocates from across the country formed the Open Educational Resources (OER) National Strategy - Stratégie nationale en matière de ressources éducatives libres (REL) group, which then developed a National Advocacy Framework for Open Educational Resources in Canada.30 This framework recognizes Canada's "responsibility to

- 24 See https://collection.bccampus.ca/
- See https://open.bccampus.ca/advocate-for-open-education/open-textbook-stats/
- 26 See https://www.kpu.ca/open/ztc
- See https://openlibrary.ecampusontario.ca/impact/. 27
- 28 See https://atlanticoer-relatlantique.ca/
- See http://www.albertaoer.com/community
- 30 McNally, M. & Ludbrook, A. (2023). A national advocacy framework for open educational resources in Canada. https://www.carl-abrc.ca/wp-content/ uploads/2023/06/A-National-Advocacy-Framework-for-Open-Educational-Resources-in-Canada.pdf



uphold the 2012 and 2019 UNESCO commitments to OER by playing an active role in the sustainable global production of freely available educational materials." In doing so it specifically highlights the importance of promotion, infrastructure development, and capacity-building for quality OER in English and French.

Opportunities and challenges for Francophone OER

Canada's bilingual status places it in a unique position to support the creation, adaptation, and adoption of OER in French. Considering the educational benefits for students, OER must represent the distinctive cultures and languages of Canadians, something that a mere translation of material from English to French cannot

accomplish. OER thus offers the opportunity to develop customizable content that reflects the unique Canadian culture, language, and research from a national, provincial, and even local context.³¹

Outside of the province of Québec, where French is the majority language, there are 22 Francophone or bilingual post-secondary institutions in Canada in a linguistic minority setting offering programs in French, with 10 of these institutions located in Ontario.³² Considering their minority status, often precarious, most provinces and territories possess limited capacity to contribute meaningfully to the creation of Francophone OER or adopt open pedagogical practices due to their many needs, whether financial, political, or resource-based.³³ Taking into consideration the Official Languages Act (1985) that underscores the mandate of the Minister of Canadian Heritage to ensure official

- 31 McNally, M. & Ludbrook, A. (2023). A national advocacy framework for open educational resources in Canada. https://www.carl-abrc.ca/wp-content/uploads/2023/06/A-National-Advocacy-Framework-for-Open-Educational-Resources-in-Canada.pdf
- 32 Association des collèges et universités de la francophonie canadienne. https://acufc.ca/
- 33 Association des collèges et universités de la francophonie canadienne et Fédération des communautés francophones et acadienne du Canada. (2022). Bâtir ensemble la postsecondaire en français de l'avenir, Rapport complet du Bilan des États généraux sur le postsecondaire en contexte francophone minoritaire. https://acufc.ca/wp-content/uploads/2022/11/Rapport.pdf

language minority communities can be educated in their own language,34 we consider OER as an opportunity for these Francophone and bilingual institutions in minority settings to provide quality and accessible education in French. This specific context was taken into account in the present study.

Since 2023 eCampusOntario has been leading efforts to significantly expand support for French language and French as a second language (FSL) OER through a two-fold approach. First, the development of new programming assets geared towards English Language colleges, universities, and Indigenous institutes who need high-quality OER to teach FSL. This has led to the creation of a new open course (available in both English and French) that all institutions can leverage focused on the effective design and delivery of their French language courses. Second, the creation of French OER as well as the English-to-French translation of select subject-specific OER from Open Library (learner- or educator-focused), identified through gaps surfaced in an environmental OER scan, thereby promoting awareness and uptake or (re) use of Open Library assets. These efforts continue to increase access to French digital teaching and learning resources and French as a Second Language (FSL), all underpinned by overall outcomes aimed at supporting sector-wide impact and Francophone Digital Transformation.

Growth and Institutionalization of OEP **Initiatives**

The relatively quick uptake of OEP across Ontario and the rest of Canada has been remarkable given the typical pace of change within higher education; however, this may be better understood in the context of the strong alignment of OEP with common institutional

goals related to equitable access, student success, and pedagogical innovation, the growing embrace of digital teaching and learning practices, and an awareness of the financial pressures faced by learners.

As awareness of the benefits of OEP has grown, so too have references to OEP in institutional strategic or academic plans and even faculty collective agreements. For example, Brock University's academic plan³⁵ includes a goal to "support the creation, adaptation, and adoption of open educational resources" whereas the collective agreement between Brock University and the Brock University Faculty Association includes "the development of open educational resources" among the innovative methods in teaching that may be included as evidence to demonstrate the quality and effectiveness of teaching in applications for tenure and promotion.36

With OEP increasingly integrated into institutional strategic planning, there has been increasing demand for resources and tactics to support the embrace of OEP within post-secondary institutions. This includes the need to establish supportive policies (e.g., tenure and promotion, intellectual property), procedures (e.g., curriculum development, course marking for OER), and practices (e.g., OER publishing, OEP professional development). Many Ontario institutions, such as York University and Conestoga College, have created open education working groups to develop and operationalize these strategies. Some institutions, like Fanshawe College and the University of Ottawa have gone further still by creating dedicated support positions (usually located in the Library or Centre for Teaching and Learning) to support this work.

- 34 See Section 43(1) of the Official Languages Act
- 35 See https://brocku.ca/vp-academic/academic-plan/
- 36 See https://bufa.ca/wp-content/uploads/2023/08/20232026bufacollectiveagreement.pdf

In support of this need for institutional capacitybuilding, over the past several years eCampusOntario has supported OER adoption via a number of practices, including financial incentives to defray the costs of building OER into courses, the OER Rangers program that sponsored faculty and staff at institutions to provide peer support, and through the Virtual Learning Strategy funding an innovative model called the OER Design Studio. The OER Rangers program had 80 participants across 49 institutions and was supported by a community of practice designed to scaffold support across the sector. eCampusOntario also funded the development of specialized OER which resulted in the creation of 17 OER in domains identified as high need/low resource. A bilingual open education training course for Rangers has formed the basis of a new Mastering Open Ed Micro-Credential that eCampusOntario is now offering.37

Given the clear benefits of OEP for students, educators, and institutions, the strong need for institutional capacity building, and the widespread desire for practical guidance concerning the use of limited resources to support OEP, it is crucial for post-secondary institutions to be able to identify and effectively address gaps in their open education efforts. This goal also aligns with UNESCO's 2019 recommendations on OER, which emphasize building capacity, developing supportive policies, promoting equitable access, and creating sustainable models.

The Present Study Aim

The primary objective of this study was to investigate and enhance the capacity of Ontario post-secondary institutions—including public colleges, universities, and Indigenous institutes to support OEP through a system-wide assessment. A secondary objective was to provide customized guidance to participating institutions, encapsulating the results of quantitative and qualitative analyses while offering feedback on their maturity level relative to the rest of the sector in Ontario.

Development of the Institutional Self-Assessment Tool, Version 2 (ISAT2)

Over the years, open education researchers have devoted significant attention to the creation of frameworks and tools to evaluate the impact of OEP. This includes the Cost, Outcomes, Use, and Perceptions (COUP) framework,38 its more contemporary counterpart, the Social Justice, Cost, Outcomes, Perceptions, and Engagement (SCOPE) framework,39 as well as the OEP Impact Evaluation Index.40 However, each of these frameworks and scales is predominantly used to assess the impact of OEP among students and/or educators. Other approaches, including social

- 37 See https://learn.ecampusontario.ca/catalog?pagename=Mastering-Open-Ed-Micro-Credential
- 38 Bliss, T. J., Robinson, T. J., Hilton, J., & Wiley, D. A. (2013). An OER COUP: College teacher and student perceptions of open educational resources. Journal of interactive media in education, 2013(1), 4-4. DOI: 10.5334/2013-04
- 39 Clinton-Lisell, V. E., Roberts-Crews, J., & Gwozdz, L. (2023). SCOPE of open education: A new framework for research. The International Review of Research in Open and Distributed Learning, 24(4), 135-153. https://doi. org/10.19173/irrodl.v24i4.7356
- 40 Naidu, S., & Karunanayaka, S. (2018). Development of the open educational practices impact evaluation index. https://idl-bnc-idrc.dspacedirect.org/server/api/core/bitstreams/7c5d163a-578b-4750-9257-2d3ade6da6c9/content

justice frameworks for OER⁴¹ and for OEP⁴² shift the unit of analysis to specific resources or practices. However, noticeable gap in this literature has been the tools or frameworks that may be used to evaluate the capacity of individual institutions to support OEP.

In 2021, Tannis Morgan, Elizabeth Childs, Christina Hendricks, Michelle Harrison, Irwin DeVries, and Rajiv Jhangiani developed and published the Institutional Self-Assessment Tool (ISAT),43 validated through a collaborative self-study across five post-secondary institutions in British Columbia.44 The ISAT drew on research on blended learning and institutional transformation and was designed to help assess how an institution has progressed with its open education initiatives.

This tool explores the institutional integration of OEP across multiple dimensions including institutional vision, advocacy, implementation, curriculum, course and program development, professional development, infrastructure and resources, policy, institutional structure, incentives, partnerships, and research and impact. In 2022, Leontien van Rossum and Robert Schuwer, both of Fontys University of Applied Sciences in the Netherlands, drew on the work of

Morgan and her colleagues as well as a maturity model for educational innovation with EdTech⁴⁵ in developing their Quickscan Open Educational Practices.46 Similar to the ISAT, this tool examines the institutional integration of OEP across multiple dimensions grouped within 5 organizational themes, including strategy and policy, people and culture, organization, governance and management, and information technology. The Quickscan also extends the analysis by assessing the maturity of institutions' embrace of OEP across four levels: pioneer level, department/ faculty level, institutional level, and crossinstitutional level.

In the present study, we drew on both the ISAT and the Quickscan Open Educational Practices to develop and refine the Institutional Self-Assessment Tool, Version 2 (ISAT2).47 This tool, which is tailored to reflect a North American post-secondary context, assesses the capacity of post-secondary institutions to support open educational practices across 22 dimensions, grouped within the following 6 themes: vision and implementation, partnerships, policies, incentives and professional development, institutional support, leadership and advocacy, and culture change (these are described in more

- 41 Hodgkinson-Williams, C. A., & Trotter, H. (2018). A social justice framework for understanding open educational resources and practices in the global south. Journal of Learning for Development, 5(3). https://doi.org/10.56059/ jl4d.v5i3.312
- 42 Bali, M., Cronin, C., & Jhangiani, R. S. (2020). Framing open educational practices from a social justice perspective. Journal of Interactive Media in Education, 2020(1). DOI: 10.5334/jime.565
- 43 See https://oepimpact.opened.ca/isat/
- 44 Morgan, T., Childs, E., Hendricks, C., Harrison, M., DeVries, I., & Jhangiani, R. (2021). How are we doing with open education practice initiatives? Applying an institutional self-assessment tool in five higher education institutions. The International Review of Research in Open and Distributed Learning, 22(4), 125–140. https://doi.org/10.19173/ irrodl.v22i4.5745
- 45 Walker, J. (2022). Maturing in practice: EdTech innovation processes in Dutch higher education. Acceleration plan educational innovation with ICT. https://www.versnellingsplan.nl/en/Kennisbank/maturity-model-for-educationalinnovation-with-edtech/
- 46 van Rossum, L. & Schuwer, R. (2022). Quickscan open educational practices. https://www.versnellingsplan.nl/en/ Kennisbank/quickscan-open-educational-practices/
- 47 See https://inclusiveeducationlab.com/isat2/

detail below). Within each dimension, the ISAT2 assesses the maturity of the institution's embrace of OEP across multiple levels. Finally, practical strategies were aligned with each dimension and maturity level to provide relevant feedback to respondents.

As part of this research project, the ISAT2 was professionally translated into French and validated through independent back-translation into English. The ISAT2 is published with a Creative Commons Attribution license⁴⁸ and available in both English and French at: https:// inclusiveeducationlab.com/isat2/

ISAT2 Groupings and Dimensions

Vision and implementation

- 1. Vision integration: Assessment of the extent to which the institutional vision considers OEP in the institutional mandate, strategic plan, academic plan, research plan, or other similar strategic planning documents, including a probe concerning the specific nature of the institutional purpose for OEP (e.g., student success, pedagogical innovation, university reputation, etc.).
- 2. Vision implementation: Assessment of the extent to which the institution is implementing an action plan for the envisioned role of OEP, including a probe concerning the current stage of vision implementation (drawn from Prochaska and DiClemente's Transtheoretical Model of Change⁴⁹).
- 3. Impact evaluation: Assessment of the extent to which evaluation of OEP initiatives is being undertaken at the institution.

Partnerships

- 4. Student partnerships: Assessment of the extent to which the institution is engaging in student partnerships to support OEP, including a probe concerning the specific nature of these partnerships.
- 5. Other internal partnerships: Assessment of the extent to which other internal partnerships support OEP, including a specific focus on the Library, Centre for Teaching and Learning, Office of the Registrar, Campus Store and a probe concerning the specific nature of such partnerships.
- 6. External partnerships: Assessment of the extent to which the institution is engaging in external partnerships to support OEP, including a probe concerning the specific nature of such partnerships.

Policies, Incentives, and **Professional Development**

- 7. Policies: Assessment of the extent to which the institution has policies in place to support OEP, including a probe concerning the specific nature of such policies.
- 8. Incentives: Assessment of the extent to which the institution provides incentives or rewards for engaging with OEP, including a probe concerning the specific nature of such incentives (e.g., monetary incentives such as stipends, recognition during tenure and promotion, informal recognition such as profiles or celebrations, etc.).
- 9. Professional development: Assessment of the extent to which the institution offers professional development opportunities related to OEP.

- 48 See https://creativecommons.org/licenses/by/4.0/
- 49 Prochaska, J., & DiClemente, C. (1984). The transtheoretical approach: Crossing the traditional boundaries of therapy. Dow Jones/Irwin.



Institutional Supports

- 10. Technology and other infrastructure: Assessment of the extent to which possesses the infrastructure to support OEP.
- 11. Resources/funding: Assessment of the extent to which the institution provides resources to support OEP.
- 12. Types of available institutional assistance: Determination of the types of institutional assistance available to support OEP (e.g., assistance with discovering OER or designing and implementing open pedagogy, dedicated grant program, dedicated staff position, etc.).
- 13. Research support: Assessment of the extent to which the institution provides research support for OEP.
- 14. Communication: Assessment of the extent to which the institution uses formal communication channels (e.g., email distribution lists, newsletters, webpages, etc.) to support OEP.

Leadership and Advocacy

- 15. Institutional structure: Assessment of the extent to which there is a formal institutional structure (e.g., dedicated positions, specialized centre, senior leadership, etc.) to support OEP.
- 16. **OEP advocates:** Determination of who are the OEP advocates at the institution (e.g., students, faculty, librarians, administrators, etc.).
- 17. Adequacy of provided institutional resources: Assessment of the extent to which the institution's senior leadership provides resources (human, financial, capital, etc.) to support OEP.

Culture Change

- 18. Awareness: Assessment of the awareness of OEP across the institution.
- 19. Utilization of provided institutional resources: Assessment of the extent to which faculty and staff are utilizing resources made available to support OEP.

- 20. Curriculum integration: Assessment of the extent to which courses and programs integrate OEP.
- 21. Perception of change in attitudes towards teaching and learning: Reflection on perceived changes in attitudes towards teaching and learning with OEP, including a probe concerning evidence or indicators that point to a shift in culture or practice (e.g., more faculty applying for grants, greater curriculum integration, more use of professional development funding for OEP, etc.).
- 22. Perceived barriers to change: Reflection on perceived barriers to changes in attitudes towards teaching and learning with OEP, including a probe concerning causal factors.

Assessment of Capacity

For dimensions that did not involve probes concerning specific manifestations or reflections on open-ended prompts, the ISAT2 provides a Likert scale that typically included five levels including a) absent, b) carried out in a limited, incidental, or informal fashion, c) localized to specialized areas of the institution, d) institutionwide yet basic, and e) institution-wide and ongoing/robust/sustainable.

Invitation to Participate in the **Online Survey**

Prior to the commencement of data collection, approval for this study was obtained from the Research Ethics Boards at Brock University and the University of Ottawa.

Data collection took place using the Qualtrics survey platform between February and July 2024. Email invitations to participate were sent to all public post-secondary institutions in Ontario that are members of eCampusOntario, including universities, colleges, and Indigenous institutes, in both anglophone and francophone contexts.

Participants were identified by eCampusOntario and included institutional leads for open education initiatives (where applicable) or Provosts/Vice Presidents Academic and their delegates (see the Appendix for a complete list of post-secondary institutions that received invitations to participate in this study).

Participants who clicked on their institution's customized survey link first encountered a digital consent form. After providing consent, participants had the opportunity to complete an online survey (the ISAT2) consisting of 28 questions, including 23 multiple-choice and 5 open-ended questions. Participants were able to delegate the survey to a colleague better positioned to answer questions regarding their institution's support for OEP, but they were instructed to keep the unique survey link confidential within their institution.

The survey, which could be completed in either English or French, was designed to take approximately 30 minutes to complete and was not timed, allowing participants to save their responses and finish the survey across multiple sessions if needed. If participants encountered questions they could not answer, they were encouraged to consult with relevant colleagues to provide the most accurate information possible.

Survey Participation

21 out of 53 invited post-secondary institutions (40%) completed the self-assessment instrument, including 13 out of 24 colleges (54%), 6 out of 23 universities (26%), and 2 out of 6 Indigenous institutes (33%). All participating institutions elected to complete the survey in English.

Survey Results

In what follows we summarize the survey responses by separately considering each dimension of institutional capacity to support open educational practices. As with the ISAT2 itself, these responses are grouped within six broad themes: a) vision and implementation, b) partnerships, c) policies, incentives, and professional development, d) institutional supports, e) leadership and advocacy, and f) culture change. In each case we summarize the overall responses for that dimension and comment on any observed differences in median responses by type of institution.



A. Vision and Implementation

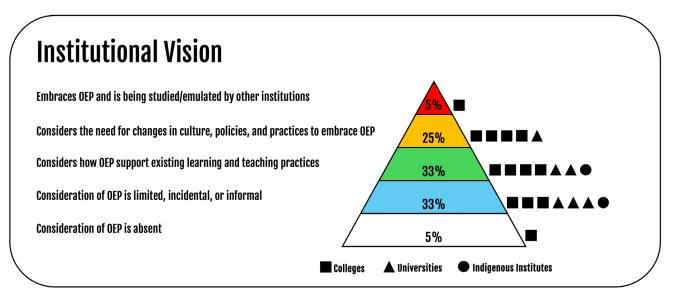


Figure 1: Integration of OEP in the Institutional Vision

1. Vision Integration

- Overall, all but one institution (20/21, 95%) reported that their institutional vision considered OEP to some degree (see Figure 1). Specifically:
 - 7 institutions reported that their institutional vision considers OEP in a limited, incidental, or informal fashion.
 - 7 institutions reported that their institutional vision considers how OEP supports existing learning and teaching practices.
 - 5 institutions reported that their institutional vision considers the need for changes in culture, policies, and practices to embrace OEP.
 - 1 institution reported that their institutional vision embraces OEP and is being studied/ emulated by other institutions.
- Looking at median responses, colleges reported somewhat greater integration of OEP with the institutional vision than either universities or Indigenous institutes.

- When probed for specifics concerning the institutional vision for OEP, the most common responses referenced student success (17/21, 81%), followed by pedagogical innovation (15/21, 71%), student savings (14/21, 66%), educator flexibility (11/21, 52%), student retention (9/21, 43%), student engagement and resource/cost saving on development of materials and services (both 8/21, 38%), student enrolment, service mission, quality improvements, and university reputation (2/21, 10%). This pattern was mirrored across both colleges and universities.
- Among the "other" reasons cited as the institutional vision for OEP were collecting and protecting cultural knowledge, returning lost knowledge back to First Nations, language preservation and access to language and cultural engagement, and opportunities to engage with elders/knowledge keepers. Additional reasons cited include collaboration for educational material development, alignment with other UNESCO initiatives, and accessibility for learners.

2. Vision Implementation

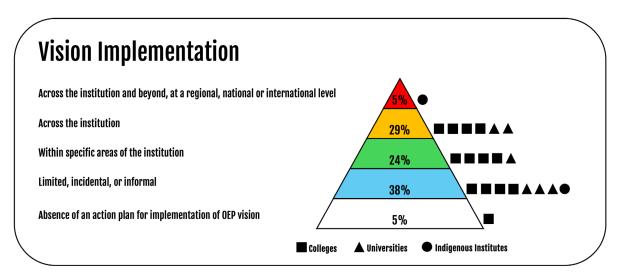


Figure 2: Implementation of Institutional Vision for OEP

- Once again, all but one institution (20/21, 95%) reported that they were implementing an action plan for the envisioned role of OEP (see Figure 2). Specifically:
 - 8 institutions reported limited, incidental, or informal action plans and implementation of the vision of OEP (e.g., by specific faculty members or departments).
 - 5 institutions reported action plans for OEP being implemented within specific areas of the institution (e.g., one or more Faculties or departments).
 - 6 institutions reported specific action plans for OEP being implemented across the institution.
 - 1 institution reported specific action plans for OEP being implemented across the institution that also intersect with plans or strategies at a regional, national or international level (e.g., UNESCO recommendation on OER).

- Looking at median responses, Indigenous institutes reported somewhat greater implementation of action plans related to the institutional vision for OEP than did colleges, which in turn reported somewhat greater implementation than did universities.
- With reference to the stage of vision implementation, the median response from Indigenous institutes was the action stage of the transtheoretical model of change, wherein implementation is well underway with the intention of continued progress. For colleges, the median response was the preparation (determination) stage of the transtheoretical model of change, wherein there is readiness to take action in the shortterm and/or the start of small steps towards implementation. For universities, the median response was the contemplation stage, wherein there is intention to implement the vision in the medium-term but some ambivalence, despite the recognition of the need to take action.

3. Evaluation of Impact

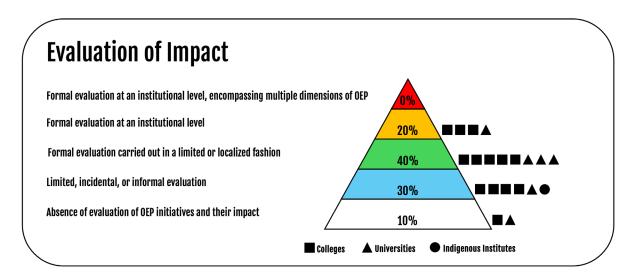


Figure 3: Evaluation of Impact of OEP Initiatives

- Nearly all (18/20, 90%) of the institutions that responded to this question reported that they were undertaking evaluation of OEP initiatives and their impact (see Figure 3).
 Specifically:
 - » 6 institutions reported limited, incidental, or informal evaluation of OEP impact (e.g., individual educators may survey their students).
 - » 8 institutions reported that formal evaluation of OEP initiatives and their impact is carried out in a limited or localized fashion (e.g., individual educators engaging in scholarship of teaching and learning or areas like the Library assessing the impact of their OEP-related operations).

- » 4 institutions reported that formal evaluation of OEP initiatives and their impact is carried out at an institutional level and informs future planning.
- » No institution reported that formal evaluation of OEP initiatives and their impact is carried out at an institutional level, encompassing multiple dimensions of OEP (e.g., impact on students, educators, and the institution), identifying gaps and opportunities, and informing future planning.
- Looking at median responses, there was no difference between colleges and universities with regard to the formal evaluation of OEP initiatives and their impact.⁵⁰

⁵⁰ Only one of the two participating Indigenous institutes responded to this question. In all such cases, the single responding institution is excluded from the analysis of median responses.

Partnerships B.

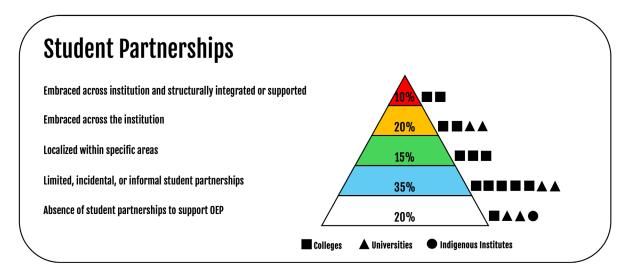


Figure 4: Student Partnerships to Support OEP

4. Student Partnerships

- The vast majority (16/20, 80%) of responding institutions reported that they were engaging in student partnerships to support OEP (see Figure 4). Specifically:
 - 7 institutions reported having limited, incidental, or informal student partnerships in OEP (e.g., limited to one-off projects or at the ad-hoc initiative of individual faculty members).
 - 3 institutions reported having student partnerships that are localized within specific areas of the institution (e.g., one or more Faculties or departments).
 - 4 institutions reported that student partnerships are embraced across the institution.
 - 2 institutions reported that student partnerships are embraced across the institution and structurally integrated (e.g., during program review/ development, etc.) or supported (e.g., fellowships, etc.).

- When probed for details concerning student partnerships, institutions most commonly reported the existence of partnerships related to co-creation, whether with specific projects (12/21, 57%), open educational resources (8/21, 38%), or teaching cases (1/21, 5%). Other partnerships related to student involvement in assessment and feedback mechanisms such as student surveys or the program review process (5/21, 24%), collaborations with student government (3/21, 14%), and strategic academic discussions (1/21, 5%). This pattern was mirrored across both colleges and universities.
- Looking at median responses, colleges reported more sophisticated partnerships with students in OEP than did universities.

5. Other Internal Partnerships

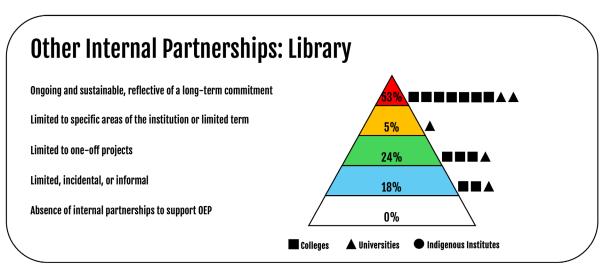


Figure 5: Partnerships with the Library to Support OEP

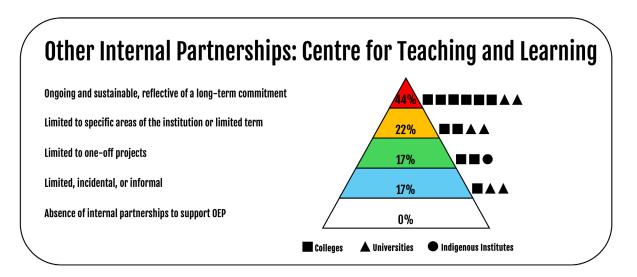


Figure 6: Partnerships with the Centre for Teaching and Learning to Support OEP

All but one institution (20/21, 95%) reported at least one other internal partnership to support OEP (see Figures 5 and 6), most commonly with the Centre for Teaching and Learning (18/21, 86%) and the Library (17/21, 81%), but in some cases also with the Campus Store (4/21, 19%), the Office of the Registrar (2/21, 10%). Less commonly, partnerships were reported with academic/curriculum leads (2/21, 10%), Institutional Quality Assurance (2/21, 10%), or the Office of Research, faculty champions, program areas, student services, micro-credential leads, and trauma-informed practices advisory group (all 1/21, 5%).

- For internal partnerships with the Library:
 - 3 institutions reported that there were limited, incidental, or informal internal partnerships to support OEP (e.g., individual relationships).
 - 4 institutions reported that internal partnerships to support OEP are limited to one-off projects.
 - 1 institution reported ongoing internal partnerships to support OEP that are limited to specific areas of the institution (e.g., one or more Faculties or departments) or that are limited term.
 - Impressively, 9 institutions reported internal partnerships with the Library to support OEP that are ongoing and sustainable and that reflect a long-term commitment across partners to support OEP.
 - Looking at median responses, colleges reported stronger internal partnerships with the Library than did universities.
- For internal partnerships with the Centre for Teaching and Learning:
 - 3 institutions reported partnerships that there were limited, incidental, or informal internal partnerships to support OEP (e.g., individual relationships).
 - 3 institutions reported that internal partnerships to support OEP are limited to one-off projects.

- 4 institutions reported ongoing internal partnerships to support OEP that are limited to specific areas of the institution (e.g., one or more Faculties or departments) or that are limited term.
- At the upper end of the spectrum, 8 institutions reported internal partnerships to support OEP that are ongoing and sustainable and that reflect a long-term commitment across partners to support OEP.
- Looking at median responses, colleges reported more sophisticated partnerships with the Centre for Teaching and Learning than did universities.
- Interestingly, where internal partnerships were reported to exist with the Office of the Registrar (1 college and 1 university) or the Campus Store (3 colleges and 1 university), these were universally regarded as ongoing and sustainable, and reflective of a long-term commitment across partners to support OEP.

6. External Partnerships

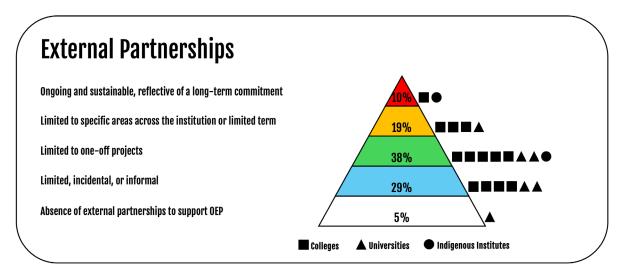


Figure 7: External Partnerships to Support OEP

- All but one institution (20/21, 95%) reported engaging in external partnerships to support OEP (see Figure 7). Specifically:
 - 6 institutions reported having limited, incidental, or informal external partnerships to support OEP (e.g. bringing in outside consultants or speakers, etc. or going to conferences and bringing the ideas back to the campus).
 - 8 institutions reported external partnerships to support OEP that are limited to one-off projects (e.g., coorganizing professional development workshops, collaborating on a research and development project, or funding the development of new open educational resources).
 - 4 institutions reported external partnerships to support OEP that are limited to specific areas of the institution (e.g., one or more Faculties or departments) or that are limited term.
 - 2 institutions reported ongoing and sustainable partnerships that are reflective of a long-term commitment across partners to support OEP.

- When probed for specifics concerning external partnerships, responding institutions most commonly referenced their partnerships with eCampusOntario (11/21, 52%), but also with other post-secondary institutions (5/21, 24%), other organizations that support open education (3/21, 14%) such as BCcampus, the Open Education Network, and Open Education Global, Indigenous partners (1/21, 5%), industry partners (1/21, 5%), educational technology vendors (1/21, 5%), community partners for specific OER projects (1/21, 5%), and accreditation bodies (1/21, 5%). Colleges and universities both referenced their partnerships with eCampusOntario the most, whereas the responding Indigenous institutes listed Indigenous partners and educational technology vendors.
- Looking at median responses, Indigenous institutes reported external partnerships that were further developed than those enjoyed at colleges, which in turn were somewhat stronger than the external partnerships reported by universities.

Policies, Incentives, and Professional Development

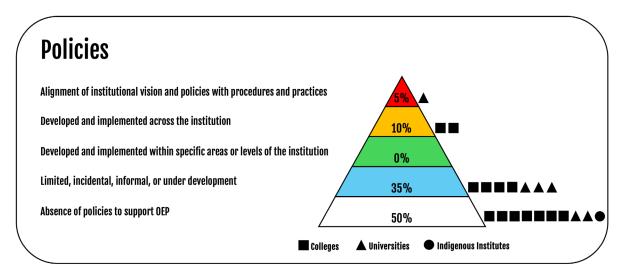


Figure 8: Institutional Policies to Support OEP

7. Policies

- Half of responding institutions (10/20, 50%) reported having policies in place to support OEP (see Figure 8). Specifically:
 - 7 institutions reported having policies that are limited, incidental, informal, or under development.
 - 2 institutions having OEP supportive policies developed and implemented across the institution.
 - 1 institution reported an alignment of their institutional vision and policies with procedures and practices that support OEP.
- When probed for specifics concerning OEP supportive policies, responding institutions referenced a mix of policies related to curriculum development (3/21, 14%), teaching and learning (2/21, 10%), learning evaluation (2/21, 10%), tenure and promotion criteria (2/21, 10%), library support (1/21, 5%), and applying Creative Commons licenses to open work (1/21, 5%). Two institutions reported that formal policies were currently in development or at the approval stage, with a further two indicating that their approach involved the provision of informal guidance instead of the establishment of formal policy (2/21, 10%).
- Looking at median responses, universities reported more progress with institutional policies than did colleges.

8. Incentives

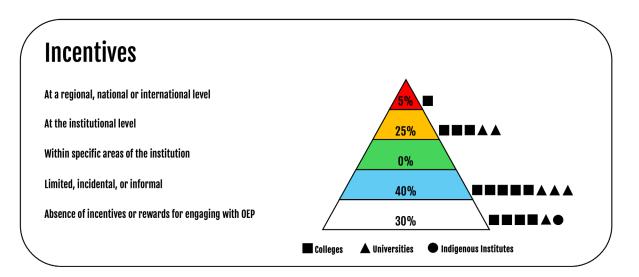


Figure 9: Incentives or Rewards for Engaging with OEP

- Just over two thirds of responding institutions (14/20) reported having incentives or rewards for engaging with OEP (see Figure 9).
 Specifically:
 - » 8 institutions reported having limited, incidental, or informal incentives or rewards for engaging with OEP.
 - » 5 institutions reported incentives or rewards for engaging with OEP at the institutional level.
 - » 1 institution reported incentives or rewards for engaging with OEP at a regional, national or international level.
- When probed for specifics concerning incentives to support OEP, institutions most commonly pointed to informal recognition (11/14, 79%), a reduction in teaching load (8/14, 57%), and grants (6/14, 43%). Other incentives listed include recognition during tenure and promotion (3/14, 21%), monetary incentives such as stipends (2/14, 14%), community showcases or knowledge sharing (2, 14%), flexible and/or adjusted work hours

- to work on OEP (1, 7%), or separate curriculum development contracts (1/14, 7%). One institution shared that they were compelled to eliminate their OER grants due to budgetary challenges.
- Whereas 8/13 colleges (62%) listed a reduction in teaching load as an incentive, none of the 6 universities did so. Colleges were also more likely to list informal recognition as an incentive (8/13, 62%) than universities (3/6, 50%). Conversely, universities were more likely to list grants (3/6, 50%) as an incentive than colleges (3/13, 23%). Finally, only universities listed recognition during tenure and promotion as an incentive (3/6, 50%).
- Looking at median responses, there was no difference between colleges and universities in the extent of incentives or rewards to support OEP.

9. Professional Development

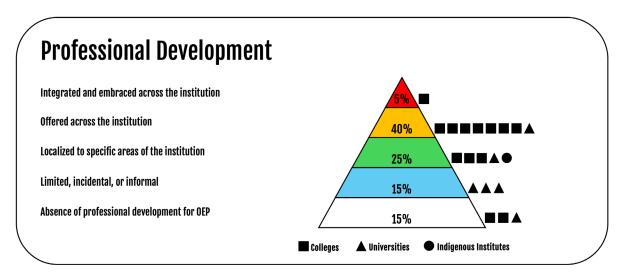


Figure 10: Professional Development on OEP

- The vast majority (17/20, 85%) of responding institutions reported offering professional development on OEP (see Figure 10). Specifically:
 - 3 institutions reported offering limited, incidental, or informal professional development on OEP (e.g., educators may use their personal development funds).
 - 5 institutions reported that some professional development on OEP is being offered, but that this is localized to specific areas of the institution (e.g., within one or more Faculties or departments).
 - 8 institutions reported offering professional development on OEP across the institution.
 - 1 institution reported that professional development on OEP is integrated and embraced across the institution.
- Looking at median responses, colleges reported providing significantly more professional development than universities.

Institutional Supports

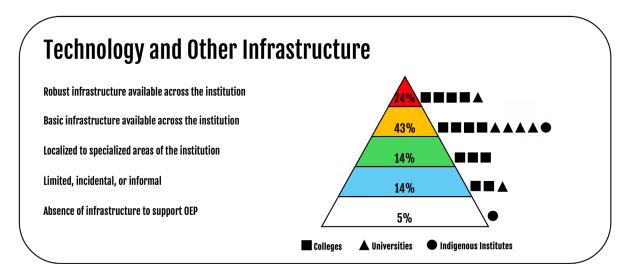


Figure 11: Technological or Other Infrastructure to Support OEP

10. Technology and Other Infrastructure

- All but one institution (20/21, 95%) reported having some technological or other infrastructure to support OEP (see Figure 11). Specifically:
 - 3 institutions reported having limited, incidental, or informal infrastructure to support OEP (e.g., individual faculty members may have subscribed to relevant technologies).
 - 3 institutions reported that infrastructure to support OEP is localized to specialized areas of the institution (e.g., one or more Faculties or departments have procured or developed relevant technologies).
 - 9 institutions reported that basic infrastructure to support OEP is available across the institution (e.g., technologies and systems to support integration of OER in the learning environment).
 - 5 institutions reported that robust infrastructure to support OEP is available across the institution (e.g., technologies and systems to support OER publishing).
- Looking at median responses, there was no difference between colleges and universities in the infrastructure provided to support OEP; however, both of these types of institutions reported providing more technology and other infrastructure than did Indigenous institutes.

11. Resources/Funding

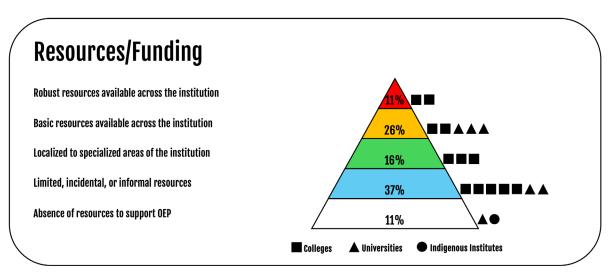


Figure 12: Funding or Other Resources to Support OEP

- Nearly all (17/19, 90%) of responding institutions reported at least some funding or other resources to support OEP (see Figure 12). Specifically:
 - 7 institutions reported limited, incidental, or informal resources to support OEP (e.g., individual faculty members may be drawing on existing professional development funding).
 - 3 institutions reported that resources to support OEP are localized to specialized areas of the institution (e.g., one or more Faculties or departments).
 - 5 institutions reported that basic resources to support OEP are available across the institution (e.g., small OER grant program).
 - 2 institutions reported that robust resources to support OEP are available across the institution (e.g., significant funding available to support OER creation and innovations with open pedagogy, etc.).
- Looking at median responses, there was no difference between colleges and universities in the funding or other resources provided to support OEP.

Types of Available **12.** Institutional Assistance

Every institution reported at least one form of institutional assistance available to support OEP. This most commonly took the form of support for designing and implementing open pedagogy via the Centre for Teaching and Learning (18/21, 86%), but also included support for discovering OER (17/21, 81%), access to platforms to technologies or platforms to support OEP and technical assistance to use these platforms (both 15/21, 71%), professional development, whether provided externally (13/21, 62%) or internally (12/21, 57%), and support for hosting and showcasing OER (11/21, 52%). Less common forms of institutional assistance included one or more dedicated staff positions to support OEP (7/21, 33%), an OER publishing program (7/21, 33%), institutional membership in one or more relevant organizations (6/21, 29%), a dedicated OEP funding or grant program (5/21, 24%), specific supports for open access scholarship (5/21, 24%), and specific supports for open education research (4/21, 19%). One institution reported that institutional research grants could be used to support open education research, a second reported that in-kind financial support was available to support OEP, while a third reported that they were developing an OER grant program.

There were five significant differences in the types of available institutional assistance across colleges and universities. Colleges were far more likely than universities to provide support for professional development outside of the institution such as open education courses/programs or open education conferences (85% vs. 17%) as well as internal professional development such as training or workshops (69% vs. 33%). Colleges were also far more likely to report having one or more dedicated staff positions to support OEP (46% vs. 17%) and to have an OER publishing program (46% vs. 17%). On the other hand, universities were more likely than colleges to provide specific supports for open access scholarship (50% vs. 15%).

13. **Research Support**

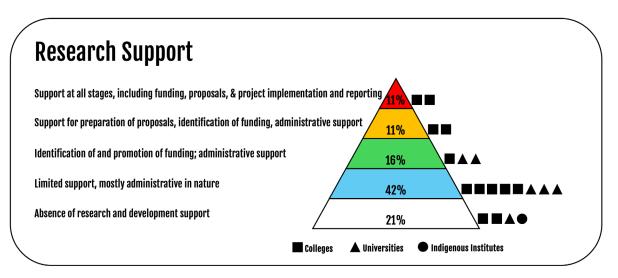


Figure 13: Institutional Research Support for OEP

- The vast majority (15/19, 79%) of responding institutions reported at least some institutional research support for OEP (see Figure 13). Specifically:
 - 8 institutions reported limited support for research on OEP, wherein most of the support is administrative in nature such as preparation of research agreement or contracts or review and submission of funding proposals.
 - 3 institutions reported support with identification of and promotion of research funding for OEP, in addition to administrative support.
 - 2 institutions reported support for the preparation of research proposals (e.g., working out a budget, undertaking literature review, consulting research

- designs and methods and providing feedback) in addition to administrative support for research on OEP and identification of external research funding opportunities.
- 2 institutions reported support for research and development of OEP at all stages, from the identification of sources of funding and preparation of research proposal to the project implementation and submission of final research report.
- Looking at median responses, there was no difference between colleges and universities in the reported institutional research support for OEP.

Communication 14.

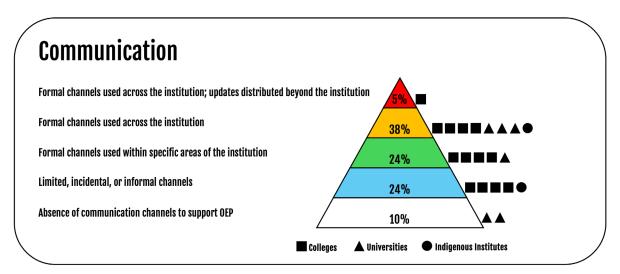


Figure 14: Communication Channels to Support OEP

- All but two institutions (19/21, 91%) reported having communication channels to support OEP (see Figure 14). Specifically:
 - 5 institutions reported that limited, incidental, or informal channels are used to support OEP (e.g., email, direct messaging).
 - 5 institutions reported that formal communication channels (e.g., periodic meetings, email distribution lists, newsletters, webpages, etc.) are used to support OEP within specific areas of the institution (e.g., one or more Faculties or departments).
 - 8 institutions reported that formal communication channels are used to support OEP across the institution.
 - 1 institution reported that, in addition to formal communication channels being used to support OEP across the institution, updates are also distributed beyond the institution (e.g., across regional, national, or international networks and associated channels).
- Looking at median responses, universities reported somewhat more sophisticated communication channels to support OEP than did either colleges or Indigenous institutes.

E. **Leadership and Advocacy**

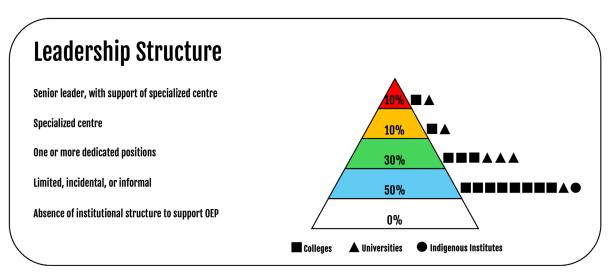


Figure 15: Leadership Structure to Support OEP

15. Leadership Structure

- All responding institutions (20/20, 100%) reported having some leadership structure to support OEP (see Figure 15). Specifically:
 - 10 institutions reported limited, incidental, or informal structure that leads and supports OEP (e.g., faculty champion, community of practice, etc.).
 - 6 institutions reported that one or more dedicated positions have been created to support OEP within units such as the Library, Centre for Teaching and Learning, etc.
 - 2 institutions reported that a specialized centre leads and supports OEP.
 - 2 institutions reported that a senior leader in the institutional structure leads the OEP initiative with the support of the specialized centre in the institution.
- Looking at median responses, universities reported a more formalized leadership structure to support OEP than did colleges.

16. **OEP Advocates**

- All but two (18/20, 90%) of the responding institutions reported knowledge of institutional advocates for OEP. Most commonly, institutional advocates were identified as librarians, support staff (e.g., from the Centre for Teaching and Learning), or administrators (all 15/20, 75%), but in many cases also faculty members (13/20, 65%). Less common were reports of student advocates (7/20, 35%), advocates from multiple internal groups such as a crossfunctional open education working group or committee (4/20, 20%), and external advocates such as those from external organizations or government (2/20, 10%).
- Colleges reported having more advocates who are administrators and faculty members than did universities (85% vs. 50% and 77% vs. 50%, respectively).

Adequacy of Provided Institutional Resources 17.

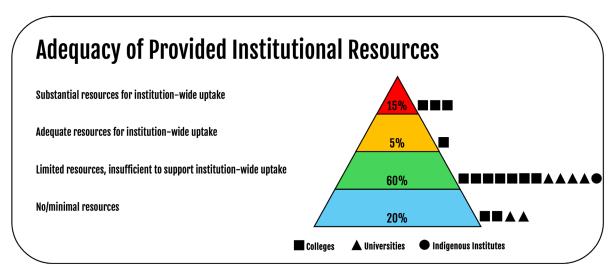


Figure 16: Adequacy of Provided Institutional Resources to Support OEP

- The vast majority (16/20, 80%) of responding institutions reported institutional resources (e.g., human, financial, capital, etc.) provided by senior leadership to support OEP that were more than absent or minimal (see Figure 16). Specifically:
 - 12 institutions reported providing limited resources (e.g., pilot funding, limited term commitments, etc.) that are insufficient to support institution-wide uptake.
 - 1 institution reported providing adequate resources to support institution-wide uptake.
 - 3 institutions reported providing substantial resources to support institution-wide uptake.
- Looking at median responses, there was no difference between colleges and universities in the degree of institutional resourcing to support OEP.

Culture Change F.

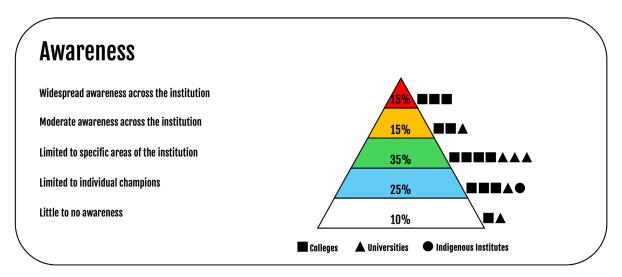


Figure 17: Institutional Awareness of OEP

18. **Awareness**

- All but two (18/20, 90%) of the responding institutions reported that institutional awareness of OEP exceeded "little to no awareness" (see Figure 17). Specifically:
 - 5 institutions reported that awareness of OEP is limited to individual champions.
 - 7 institutions reported that awareness is limited to specific areas of the institution (e.g., one or more Faculties or departments).
 - 3 institutions reported moderate awareness of OEP across the institution.
 - 3 institutions reported widespread awareness of OEP across the institution.
- Looking at median responses, there was no difference in the degree of institutional awareness of OEP reported by colleges and universities.

Utilization of Provided Institutional Resources 19.

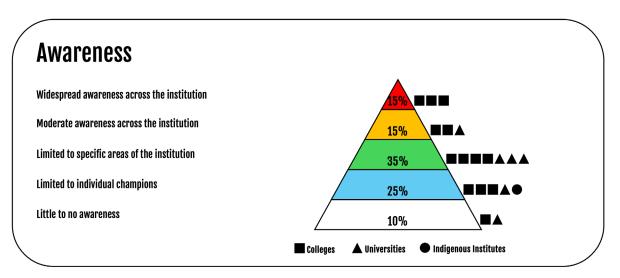


Figure 18: Utilization of Available Resources to Support OEP

- Nearly two-thirds (12/19, 63%) of responding institutions reported that the utilization of available resources to support OEP exceeded "little to no uptake" (see Figure 18). Specifically:
 - 9 institutions reported that there was sufficient uptake to justify the provision of ongoing support.
 - 3 reported that there was significant uptake that demonstrated a strong return on investment.
 - No responding institution reported that the demand for resources was stronger than could be sustained.
- Looking at median responses, colleges reported somewhat greater utilization of available resources to support OEP than did universities.

Curriculum Integration 20.

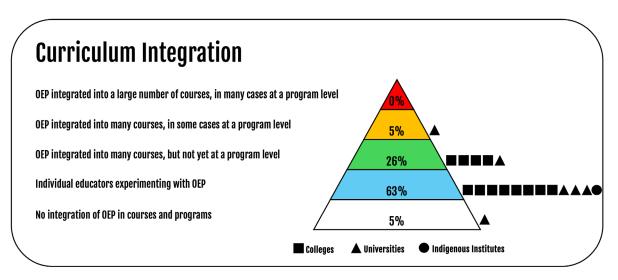


Figure 19: Integration of OEP into Courses and Programs

- All but one (18/19, 95%) of responding institutions reported some integration of OEP into courses and programs (see Figure 19). Specifically:
 - 12 institutions reported that whereas individual educators were experimenting with OEP in their courses, this was not integrated at the program level.
 - 5 institutions reported that a large number of educators have integrated OEP into their courses (although this was not yet at the programmatic level).
 - 1 institution reported that OEP is integrated into a large number of courses, in some cases also at the program level.
 - No responding institution reported that OEP is integrated into a large number of courses at the program level.
- Looking at median responses, there was no difference in the degree of reported curriculum integration between colleges and universities.

Perception of change in attitudes towards teaching and learning 21.

- Of the 17 institutions that provided reflections on perceived changes towards the use of OEP in support of teaching and learning, only 1 reported perceiving no changes in teaching culture or practice.
- The following are the themes that emerged among reported indicators of change:

Growth in the number of faculty champions

"We are starting to see more faculty embracing OEP and beyond OER adoption, but it is still in the early days at [institution] and is expected to grow"

"Faculty are requesting grants to co-create resources with their students. Many are interested in trying new forms of assessment because their traditional assessments are lacking in light of generative AI."

"More faculty have been applying for grants"

"Growing interest and more OER project and conversions every year."

"Changes in attitude, starting to adapt to OEP and shifting to culture of acceptance"

"There is indeed an appetite amongst faculty regarding OER and OEP. Many faculty members are willing to explore the impact of OER and OEP."

"Scarcity is firing faculty members' imaginations and they are seeking opportunities to innovate and invigorate curricula (and student interest in curricula)."

Leadership from the Center for Teaching and Learning

"...our Centre for Teaching and Learning is spreading information via newsletters and teaching and learning PD opportunities."

"our Centre for Teaching and Learning . . . has been supporting faculty to embed SoTL research questions when they engage with us to learn and apply new teaching techniques and practices."

"Promotion through . . . CTL."

"The CTL and digital pedagogy units champion OEP's."

Integration in development or quality assurance of curriculum

"Promotion through curriculum development"

"OER development is also embedded in the quality assurance processes for monitoring."

Increase in resourcing

"Greater resourcing"

"A new OER student ancillary fee will be introduced this coming fall, and that will support the hiring of co-op students moving forward. OER development is also embedded in the quality assurance processes for monitoring."

Other indicators of perceived change mentioned by responding institutions included:

Integration into broader institutional strategy:

"There is an institutional commitment strategically to the implementation of OEP"

"Integration through digital learning strategy"

Use of communication channels

"Our Centre for Teaching and Learning is spreading information via newsletters"

Encouragement from administrators

"Our micro-credential course development team, however, is being tasked by a senior leader to learn about OERs and embrace the opportunity to embed them into MC courses"

Upskilling of staff

"Our Teaching and Learning Specialist has also just completed the eCampus Ontario Open Education Resource Ranger program."

Perceived barriers to change 22.

Looking at respondents' reflections on reported barriers to change, there were four themes that emerged across multiple responses. These include:

Inadequate funding or other resources

"There is an institutional commitment strategically to the implementation of OEP but we have yet to secure permanent institutional funding."

"There is a desire to adopt OER/OEP, but lack of funds/faculty loading time for this prevents uptake."

"Many faculty members are willing to explore the impact of OER and OEP. However, we are still limited by insufficient resources, so a fair compensation model and/or a structured development program are needed."

"With the current budget challenges we are facing, we're currently limited in our ability to provide ongoing, base-funded support for OEP at the institutional level."

Inadequate time to develop or integrate OER

"[Faculty] are reluctant to search for new course material because it is a complex investment in time to convert their courses to offer new course resources."

"The development of new OER is very time-consuming and requires a sustained commitment from faculty and leadership."

"There is a desire to adopt OER/OEP, but lack of funds/faculty loading time for this prevents uptake."

Skepticism or internal resistance

"There are still sceptics but attitudes are changing as they see they are supported."

"Faculty are reluctant to embrace OEP and are misinformed on the quality of the resources available."

"It is still a challenge to get faculty to discuss these things at a programmatic level."

Commercial resources and publisher/vendor practices

"I would say that one of our greatest challenges is commercial online publisher content (textbooks with integrated teaching tools), that are being increasingly taken up at cost to students."

"The library has implemented a program to purchase course material such that there are an unlimited amount of users, effectively creating barrier free access for students. This program is not advertised because funding is very limited. For every dollar that the library has spent it has saved approximately ten for students. But the publishers and vendors do not offer electronic resources to libraries to purchase as unlimited users because the publishers want to maintain their hold on charging students directly for materials. Regardless, their textbook profits are down. Equitable access is not a solution and this service is overcharging students and should be recognized as profit driven."

Other indicators of perceived barriers to change mentioned by responding institutions included:

Quality control with OER

"Quality control measures to ensure the resources are both good and useful."

Absence of technological or other expertise

"Uptake is minimal due to technological barriers (they cannot "code", etc.). So yes, we want to shift to using OERs, but our staff is very limited both in numbers and skillsets."

Reliance on sessional instructors

"Our instructors are part-time sessional instructors so are simply hired to deliver a course. They rarely invest extra time into redesigning or improving the base curriculum, so aren't asking about OERs."

Protection of cultural knowledge

"Another consideration for us, however, is the role of cultural knowledge--as we collect and include it in our courses it must be protected and honoured as belonging to the people of [First Nation], and not given out to the world to take or change. So yes, we want "open" resources and knowledge about [First Nation] embedded into all our courses, but only for use *within our institution* and not the wider world."

G. Overall Trends

Dimensions of support for OEP: Median institutional responses **Vision integration Vision implementation** Library partnerships Leadership **Evaluation of impact** structure **External partnerships Student partnerships Centre for Teaching & Learning** Professional development partnerships **Incentives** Communication **Technology & other Research support** Resources/funding infrastructure **Curriculum integration Adequacy of resources Awareness Policies Utilization of resources** Weaker dimensions Stronger dimensions

Figure 20: Depiction of the Relative Strength of the Various Dimensions of Support for OEP, Based on Median Institutional Responses

Looking across the various dimensions of internal capacity to support OEP, it is clear that post-secondary institutions across Ontario are strongest when it comes to their internal partnerships with the Library and Centre for Teaching and Learning (see Figure 20). Given the strong reliance of OEP on software, tools, and platforms to support discoverability, publication, and sharing of OER as well as to support student engagement with OEP, it is not a surprise that institutions also provide reasonably strong technological and other infrastructural support for OEP.

There was only moderate institutional support across the majority of dimensions of internal capacity, with plenty of room for further investment in funding and other institutional resources to support OEP, the development of external partnerships and professional

development opportunities, the use of communication channels, and the evaluation of impact of OEP initiatives. These modest levels of institutional support reflect the lukewarm embrace of OEP within institutional visions, as well as in the moderate levels of institutional awareness of OEP and utilization of provided resources.

Most institutions lacked a formalized structure or a specialized centre to lead OEP initiatives and had relatively weak student partnerships in support of OEP. Other dimensions that reveal significant room for improvement include institutional incentives or rewards to support OEP, research support for OEP, and the integration of OEP into the curriculum. Finally, the dimension that showed the weakest support for OEP was institutional policy, a lost opportunity and gap that has been previously identified.⁵¹

⁵¹ Skidmore, J. & Provida, M. (2019). A place for policy: The role of policy in supporting open educational resources and practices at Ontario's colleges and universities. https://www.ecampusontario.ca/wp-content/uploads/2019/08/2019-08-07-skimore-oe-policy-report.pdf

Looking at differences between types of institutions, it appears clear that Ontario's colleges have developed a greater capacity to support OEP than the universities. For example, responding colleges reported greater integration of OEP with institutional visions, greater implementation of their action plans, and more sophisticated partnerships (including with students, the Library and Centre for Teaching and Learning, and external bodies). Colleges also support more professional development, are more likely to have dedicated staff positions to support OEP and have an OER publishing program, experience greater uptake of available resources, and have more advocates who are administrators and faculty. Conversely, there were only four dimensions along which responding universities demonstrated greater maturity with OEP supports: institutional policies, open access scholarship, communication channels, and formalized leadership structure.

Given the small number of Indigenous institutes that participated in this survey, it is not possible to point to broad trends; however, the two responding institutions did report somewhat greater implementation of action plans and stronger external partnerships than either colleges or universities, while providing less technology and other infrastructure to support OEP than other types of institutions. However, beyond the dimensions of OEP capacity covered

by the ISAT2, it is important to recognize that there are unique considerations when embracing OEP in the context of Indigenous institutions, including those pertaining to Indigenous knowledge and intellectual property. This is an especially active area of scholarship and professional development, including by groups such as Local Contexts,⁵² eCampusOntario,⁵³ the Canadian Association of Research Libraries - Association des bibliothèques de recherche du Canada (CARL – ABRC),⁵⁴ and Open Education Global.⁵⁵

Reflections

Support and Encouragement for OEP in Ontario

As noted above, the Ontario Ministry of Colleges and Universities (MCU) has sponsored investment in digital by design education through the Virtual Learning Strategy (VLS). eCampusOntario supported the design, delivery and distribution of three rounds of VLS funding from 2000-21 to 2023-24.56 Half of this investment focused on OER and supporting institutions to embrace OEP. The OER Rangers program, for example, was a support system and community of practice to enable peers to tap into the expertise of others in OER use, reuse, and adoption, but also OEP more broadly:

- 52 See https://localcontexts.org/
- 53 McCracken, K., & Hogan, S. Community first: Open practices and Indigenous knowledge. https://www.ecampusontario.ca/wp-content/uploads/2020/08/OEProject-McCracken.pdf
- 54 See https://www.carl-abrc.ca/news/announcing-the-indigenous-knowledges-and-open-education-webinar-series/
- Lar-Son, K. (2023). 6 R's of Indigenous OERs: Rethinking and reworking Indigenous open education. Keynote address at the 2023 Open Education Global Conference. https://youtu.be/WGY7KSDmn-I?si=DpNXBRA3piJ8VjF7
- 56 See https://vls.ecampusontario.ca/

The Open Rangers form a network of Ontario post-secondary educators and practitioners interested in supporting the advancement of open education within their institution. Open Rangers have virtual meet-ups year-round and have the chance to attend the Open Education Ontario Summit, an annual event that brings both new and seasoned Rangers together to provide a safe space for brainstorming future directions for advancement in open education.57

Another example of how support for OEP was operationalized across the province was the federation of institutional OER libraries with the Open Library. By fostering increased ability to discover OER, coupled with adoption incentives and the OER Ranger program, eCampusOntario was able to expand OER and OEP use across the Ontario postsecondary education sector.

In August 2024 the then-Minister of MCU, the Honourable Jill Dunlop, issued a memorandum to all university and college presidents regarding the "Directive on the Costs of Educational Material under the Ministry of Training, Colleges and Universities Act." The memorandum referenced recent government legislation (the Strengthening Accountability and Student Supports Act, 2024) that is intended to provide clarity on the costs of education for all learners. Included here is the cost of textbooks and ancillary fees. Additionally, institutions are asked to encourage their faculty to use OER "to help make education more affordable for students," with a reference to the eCampusOntario Open Library included. As this directive shows, the provincial government is promoting the use of OER as a means of saving money for students and their families. The government's investment of \$35 Million in OER

and OEP may be seen as a catalyst for supporting lower educational costs for students. As the costs of education are of increasing import to all institutions, the government's encouragement of OER use may help adoption become more widespread.

Next steps

Although we would have preferred to see a higher participation rate in the survey, particularly among universities and francophone institutions, this report nonetheless identifies areas of relative strength and weakness across the Ontario post-secondary sector in relation to the capacity to support OEP. These findings do represent an important baseline for measuring the support of OEP in the Ontario postsecondary education sector. Importantly, the findings can not only inform the work of individual institutions but can also guide collaborative capacity development across the sector. At a time when post-secondary institutions are challenged by fiscal realities and must make the most of limited resources, it is vital that efforts focus on domains and tactics that will yield the greatest returns on institutional investments.

While it may be uncommon to identify a single initiative that can deliver better outcomes for students, educators, and institutions, OEP represents just such an opportunity. However, for far too long individuals who have wished to embrace OEP within Ontario's post-secondary institutions have found themselves swimming against the current, whether these be faculty members whose efforts to create OER or adopt open pedagogy go unrecognized, or Library, Centre for Teaching and Learning staff who labour to support OEP outside of and in addition to their normal duties, or indeed students who have advocated for the use of OER in order to displace high textbook costs.

The time has come to reimagine the future of higher education in Ontario as one in which the embrace of OEP represents the norm rather than the exception. The recommendations that follow aim to identify practical next steps in the path to open.

Recommendations

- 1. Strategize: Consider integrating an explicit reference to OEP within the institutional strategic plan or academic plan. This may be in the context of priorities or themes related to student success, pedagogical innovation, or equity, diversity, and inclusion. Once this is achieved, develop an implementation plan for this strategic goal that outlines ambitious yet achievable operational goals. Ensure that relevant metrics or milestones are aligned with goals related to OEP to ensure that progress may be tracked.
- 2. Lead: If one does not already exist, create a cross-functional open education working group that includes representation from the Library, Centre for Teaching and Learning, Student Association, and Campus Store, in addition to faculty representation. Designate a senior academic leader (e.g., University Librarian or Vice Provost or Director, Teaching and Learning) to coordinate or liaise with this group.
- 3. Partner: Deepen internal partnerships in support of OEP with areas such as the Library and Centre for Teaching and Learning and develop new partnerships with other areas such as the Campus Store and Office of the Registrar. Take the opportunity to develop a partnership with the undergraduate student association on OER initiatives, whether to raise awareness of textbook unaffordability

- and the availability of OER or even to jointly fund an OER grant program. Externally, leverage the resources that eCampusOntario provides to the sector, including the Open Library⁵⁸ and the Open Publishing Infrastructure.59 Looking further afield, consider joining groups or organizations such as Canada OER, the Open Education Network, Open Education Global, the Creative Commons Education Platform, and the Scholarly Publishing and Academic Resources Coalition (SPARC).
- 4. Encourage: Identify and align appropriate incentive structures for OEP, whether formal (e.g., time releases, grants, etc.) or informal (e.g., recognition and celebration of OEP champions). Consider revisions to policies (and accompanying procedures) in areas such as intellectual property, curriculum development, or tenure and promotion so that these explicitly permit and or encourage (but do not mandate) the embrace of OEP. Raise awareness of OEP and provide regular professional opportunities for educators, whether in the form of OER101 workshops, communities of practice for open pedagogy, or campus-wide events during Open Education Week.60
- 5. Staff: If possible, invest in the creation of one or more dedicated positions (e.g., OER Librarian) or at least revise one or more existing staff job descriptions in areas such as the Library or Centre for Teaching and Learning to ensure that work to advance OEP is prioritized and sustainably supported. Support appropriate professional development for these roles, including with the eCampusOntario "Mastering Open Ed Micro-Credential" that is free for individuals from eCampusOntario member institutions. Also consider other opportunities such as SPARC's Open Education Leadership Program⁶¹ or the
- 58 See https://openlibrary.ecampusontario.ca/support/
- 59 See https://openlibrary.ecampusontario.ca/create/
- 60 See https://www.oeglobal.org/activities/open-education-week/
- 61 See https://sparcopen.org/our-work/open-education-leadership-program/

- Open Education Network's Certificate in Open Education Librarianship⁶² and Certificate in Open Pedagogy.63
- 6. Fund: If possible, support a limited number of curricular integrations of OER each year, potentially targeting program areas that enjoy an abundance of high-quality OER and that that also have high student enrolment. Consider starting by incentivizing educators to review relevant OER64 within their discipline and go on to creating an OER Adoption Grant program⁶⁵ that recognizes the labour involved in shifting to OER with a small stipend.
- 7. Integrate: Embed support for OEP within major institutional platforms and technologies. This may include importing MARC (machine-readable cataloging) records for open textbooks into the Library catalogue, making it easy for educators to embed OER within the Learning Management System, enabling course marking for OER or ZTC courses in the Student Information System and Course Timetable, including OER as an option in the Campus Store's course materials reporting platform, and creating a OER dashboard using the Institutional Research Office's tools.
- **8. Communicate:** Use existing communication channels to share resources, opportunities, and other updates related to OEP with educators. This may include regular newsletters, bulletins, or other outreach from the Library and Centre for Teaching and

- Learning as well as periodic updates from senior academic leadership. Work with the student association to communicate with students, for example, in support of raising awareness around initiatives related to the affordability of course materials.
- **Research:** Support scholarship of teaching and learning on open educational practices through existing internal training and funding, as well as by promoting relevant external opportunities such as the Open Education Group's Open Education Research Fellows program⁶⁶ and the mentorship and resources⁶⁷ provided by the Global OER Graduate Network.68 Consider working towards developing an OER Research Fellowship program⁶⁹ for faculty members.
- 10. Collaborate: Collaborate across the sector, including on professional development (e.g., shared events during Open Education Week) and OER creation projects. Openly license training and promotional materials (e.g., OER101 workshop content) and other resources (e.g., OER LibGuides) to permit their wider reuse and adaptation.

Bonus recommendation:

- 11. Self-assess: If your institution did not participate in this study, use the ISAT2 to selfassess your institution's capacity and maturity and share your results with the research team at ierl@brocku.ca
- 62 See https://open.umn.edu/oen/certificate-in-open-education-librarianship
- 63 See https://open.umn.edu/oen/certificate-in-open-pedagogy
- 64 See https://openlibrary.ecampusontario.ca/review-an-oer/
- 65 See https://brocku.ca/library/oer/grants/
- 66 See https://openedgroup.org/fellows/
- 67 See https://go-gn.net/gogn_outputs/open-research-handbook/
- 68 See https://go-gn.net/
- 69 See https://www.kpu.ca/open/research-fellowship

Appendix

Public post-secondary institutions in Ontario invited to participate in the survey.

70 All current members of eCampusOntario were invited to participate in the survey.

Colleges

Algonquin College

Collège Boréal

Cambrian College

Canadore College

Centennial College

Conestoga College

Confederation College

Durham College

Fanshawe College

Fleming College

George Brown College

Georgian College

Humber College

Collège La Cité

Lambton College

Loyalist College

Mohawk College

Niagara College

Northern College

St. Clair College

St. Lawrence College

Sault College

Seneca College

Sheridan College

Indigenous Institutes

First Nations Technical

Institute (FNTI)

Kenjgewin Teg

Ogwehoweh Skills and Trades

Training Centre

Oshki-Pimache-O-Win: The

Wenjack Education Institute

Seven Generations

Education Institute

Six Nations Polytechnic

Universities

Algoma University

Brock University

Carleton University

University of Guelph

Université de Hearst

Lakehead University

Laurentian University

McMaster University

Nipissing University

OCAD University

Université de l'Ontario français

Ontario Tech University

University of Ottawa

Queen's University

Royal Military College of Canada

Toronto Metropolitan University

University of Toronto

Trent University

University of Waterloo

University of Windsor

Western University

Wilfrid Laurier University

York University