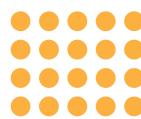
Leading With Openness

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

Rajiv S. Jhangiani, Oya Pakkal, Clint Lalonde, and Josie Gray





The <u>Inclusive Education Research Lab</u> 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.



<u>BCcampus</u> is a publicly funded organization that supports innovation, collaboration, and openness across British Columbia's post-secondary education system. In alignment with provincial priorities, BCcampus leads and facilitates projects that advance inclusive, evidence-informed teaching and learning. A key focus of BCcampus is the development and adoption of open educational resources (OER), empowering educators and learners through equitable access to high-quality, openly licensed materials.

Acknowledgements

We are grateful to Wenting Rong and Rakha Zabin from Brock University's Inclusive Education Research Lab for their contributions in support of this report.

The research outlined in this report was supported by BCcampus.

How to cite this report

Jhangiani, R. S., Pakkal, O., Lalonde, C., & Gray, J. (2025). <u>Leading With Openness: A</u>

<u>Report on the Capacity of British Columbia's Post-Secondary Institutions to Support Open</u>
<u>Educational Practices</u>. BCcampus.

This report is licensed under a Creative Commons Attribution 4.0 International Licence.

Contents



Research	real	M	4
Executive	Sun	nmary	5
Backgrou	Open Education Overview		
	Оре	en Education Overview	6
	Edu	cational Benefits of OEP	7
	Can	ada's Leadership in OER	8
	Gro	wth and Institutionalization of OEP Initiatives	9
The Prese	ent S	tudy	11
	Aim		11
	Ove	rview of ISAT2 Groupings and Dimensions	11
	Ass	essment of Capacity	14
	Pro	cedure	14
	Sur	vey Participation	15
Survey Results		16	
	A.	Vision and Implementation	16
	В.	Partnerships	21
	C.	Policies, Incentives, and Professional Development	30
	D.	Institutional Supports	35
	E.	Leadership and Advocacy	40
	F.	Culture Change	43
Overall T	Overall Trends		
Next Ste	Next Steps		
Recommo	enda	tions	52
Appendix	A:	List of B.C. Public Post-Secondary Institutions	54
Appendix	В:	Regional Groupings	55
	Inte	rior	55
	Isla	nd	55
	Low	ver Mainland	55
	Nor	th	55

Research Team



Dr. Rajiv Jhangiani

Dr. Rajiv Jhangiani is Vice Provost, Teaching and Learning, and Director, Inclusive Education Research Lab, at Brock University, where he holds faculty appointments in the departments of educational studies and psychology and is affiliated with the Social Justice Research Institute and the social justice and equity studies MA program. A global leader in open education and an award-winning educator, his scholarship focuses on open educational practices, student-centered pedagogies, and ethical approaches to educational technology. Dr. Jhangiani has advised the British Columbia Ministry of Post-Secondary Education and Future Skills on its Digital Learning Strategy, Micro-credential Framework, and Ethical Educational Technology Toolkit. He formerly served as an ambassador for the global advocacy of OER with the International Council for Open and Distance Education and currently serves on the boards of the Canadian Digital Learning Research Association and Open Education Global.



Oya Pakkal

Oya is a PhD candidate in the faculty of social sciences and a sessional instructor in the faculty of education at Brock University. She is also the lab manager at the Inclusive Education Research Lab. Her SSHRC-funded doctoral research examines how invisibly and visibly marginalized learners navigate educational spaces, with a focus on belonging, representation, and systemic barriers. Oya's work extends to inclusive education initiatives focused on open access and affordability. As a 2023-2024 Open Education Research Fellow, she co-authored peer-reviewed articles on zero textbook cost programs and social justice framing in course design. She also contributed to eCampusOntario's sector-wide report *On a Path to Open*, highlighting the role of OERs in improving affordability and access across Ontario's post-secondary institutions. Beyond her research, Oya is an advocate for accessibility and equity in higher education. She received Brock University's accessibility and inclusion recognition award in 2024 for her leadership in advancing anti-ableism initiatives.



Clint Lalonde

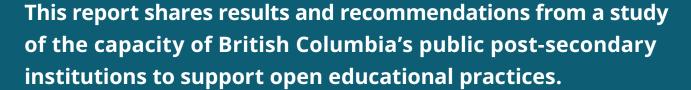
Clint Lalonde is an educational technologist and advocate for the use of open educational resources and open education practices in higher education. He has worked in various positions within the British Columbia post-secondary system for 25 years and is currently Executive Director (Interim) for <u>BCcampus</u>, a government-funded program office that provides teaching, learning, educational technology, and open education support for the British Columbia post-secondary sector. A founding member of the <u>B.C. Open EdTech Collaborative</u>, Clint has served on numerous advisory boards for open education projects and is a past board member of the <u>Apereo Foundation</u>.



Josie Gray

Josie Gray is Interim Director, Open Education at BCcampus where she leads a team that develops and implements initiatives that advance open educational practices in the B.C. post-secondary system. Since 2016, Josie has been deeply involved in learning and instructing on accessibility best practices within open educational resources. Her expertise is further bolstered by her attainment of a master of design in inclusive design from Ontario College of Art & Design University.

Executive Summary





The report begins with a brief overview of open education and the educational benefits of using open educational practices (OEP). It emphasizes Canada's leadership in open educational resources (OER), particularly within British Columbia and Ontario, as well as the national collaborations that are working to support open education across provincial lines. It describes the growth and maturation of OEP initiatives in B.C., undergirded by supports, infrastructure, and resources provided by BCcampus, and demonstrated by increasing references to OEP in institutional guidelines, policies, and strategic documents, and more inter- and intra-institutional collaboration on open education initiatives.

The report describes the Institutional Self-Assessment Tool, Version 2 (ISAT2), the research instrument used in this study, including an overview of its 23 dimensions organized into the following six groupings:

- 1. Vision and implementation
- 2. Partnerships
- Policies, incentives, and professional development
- 4. Institutional supports
- 5. Leadership and advocacy
- 6. Culture change

Detailed results are presented from the online survey of British Columbia's universities, colleges, and institutes. To account for the diversity of the B.C. post-secondary system, the report breaks down results based on institution type and looks at how geography influences the results. The overall response rate was 77%, with variations based on type of institution. Dimensions of support for OEP where institutions demonstrate stronger capacity include awareness, partnerships (especially with libraries), technology and other infrastructure, and institutional communications. Conversely, dimensions of support for OEP where institutions demonstrate weaker capacity include student partnerships, policies, incentives, resources/funding, leadership structure, curriculum integrations, and research support.

The report closes with a set of 11 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, system 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 they 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 often centre on the use of open educational resources, which are learning, teaching, and research materials available in various formats that are either in the public domain or released under an open licence (e.g., Creative Commons) 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 licences 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 licences.⁴

Open educational practices also encompass the embrace of open pedagogy, which refers to collaborative teaching practices that may draw on OER but also invite students to co-create the learning experience. Open pedagogy may 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. For example, this may include students creating OER as part of their coursework via the design of "renewable assignments" (often using open educational technologies and platforms such as Wikipedia, WordPress, H5P, or Hypothes.is). These types of assignments have a larger

- 1 Jhangiani, R.S., and Biswas-Diener, R., (2017). *Open: The philosophy and practices that are revolutionizing education and science.* Ubiquity Press.
- 2 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.
- 3 UNESCO. (2019). Recommendation on open educational resources (OER).
- 4 State of the Commons 2022 by Creative Commons is licensed via CC BY 4.0.
- 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.
- 6 DeRosa, R., & Jhangiani, R. (2018). <u>Open pedagogy</u>. In E. Mays (Ed.), A guide to making open textbooks with students. Rebus Community.
- Seraphin, S. B., Grizzell, J. A., Kerr-German, A., Perkins, M. A., Grzanka, P. R., & Hardin, E. E. (2019). <u>A conceptual framework for non-disposable assignments: Inspiring implementation, innovation, and research</u>. *Psychology Learning & Teaching*, *18*(1), 84-97.

audience, longer life, and greater impact than traditional "disposable" assignments. It may also involve the provision of greater agency to learners through 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 do not purchase all of their required textbooks and many students even select or drop courses on the basis of textbook costs."^{8 9} These unfortunate choices are disproportionately made by first generation students, students of colour, and those from disadvantaged socio-economic 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 it 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 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 having zero required textbook costs.¹⁹

- 8 Jhangiani, R. S., & Jhangiani, S. (2017). <u>Investigating the perceptions, use, and impact of open textbooks: A survey of post-secondary students in British Columbia</u>. *The International Review of Research in Open and Distributed Learning*, 18(4).
- 9 Versluis, A., Martin, H., Ward, R., Green, N., Cheskes, R., & Cassidy, M. (2017). <u>#TextbookBroke: Findings of a University</u> of Guelph student survey on textbook purchasing behaviours and outcomes.
- 10 Correa, E., & Bozarth, S. (2023). <u>To eat or to learn? Wagering the price tag of learning: Zero cost textbook degree</u>. *Equity in Education & Society, 2*(2), 126-137.
- 11 Dubick, J., Mathews, B., & Cady, C. (2016). Hunger on campus: The challenge of food insecurity for college students.
- 12 Allen, N. (2018). \$1 billion in savings through open educational resources. SPARC.
- 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).
- 14 Hendricks, C., Reinsberg, S.A., and Rieger, G. (2017). <u>The adoption of an open textbook in a large physics course:</u>
 <u>An analysis of cost, outcomes, use, and perceptions</u>. *The International Review of Research in Open and Distributed Learning, 18*(4).
- 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.
- Jhangiani, R. S., Dastur, F. N., Le Grand, R., & Penner, K. (2018). <u>As good or better than commercial textbooks:</u> <u>Students' perceptions and outcomes from using open digital and open print textbooks.</u> *Canadian Journal for the Scholarship of Teaching and Learning, 9*(1).
- 17 Colvard, N. B., Watson, C. E., & Park, H. (2018). <u>The impact of open educational resources on various student success metrics</u>. *International Journal of Teaching and Learning in Higher Education*, *30*(2), 262-276.
- 18 Lambert, S. R. (2018). <u>Changing our (dis) course: A distinctive social justice aligned definition of open education</u>. Journal of Learning for Development, 5(3).
- 19 Griffiths, R., Mislevy, J., Wang, S., Ball, A., Shear, L., & Desrochers, D. (2020). <u>OER at scale: The academic and economic outcomes of Achieving the Dream's OER degree initiative</u>. SRI International.

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. 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.²² Promisingly, recent experimental research shows that learning environments that are designed to foreground open educational practices produce a greater intent on the part of students to register, more positive perceptions of school support and acceptance, better relations with faculty and staff, and higher instructor evaluations.²³

Canada's Leadership in OER

For more than ten years, Canada has been a global leader in OER usage. This began in British Columbia, where the B.C. Open Textbook Project was launched in 2012 with a \$1 million investment from the provincial government. This project aimed to identify, adapt, or create openly licensed textbooks for the 40 highest enrolled 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 <u>B.C. Open Collection</u> hosts 352 open textbooks, 19 course packs, and 851 other course materials that have been adopted across 43 institutions by over 1,000 faculty members, saving 350,000 students over \$40 million.²⁴ This number relies on self-reporting of OER adoption and is therefore likely a conservative estimate of actual savings for learners. This includes OER adoptions at institutions such as <u>Kwantlen Polytechnic University</u> (KPU) that have developed numerous zero textbook cost (ZTC) degree programs.²⁵

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 2020-2021 to 2023-2024. OER use in Ontario is significant: 93% of eCampusOntario's 56 member institutions report OER adoption by 18,411 faculty and staff across the province, impacting a total of over 442,429 learners. This generates significant savings for learners – \$40,304,589 and counting to date. The eCampusOntario Open Library currently houses 9,058 resources and 7,736 shareable activities in its H5P studio, and 32 members have federated the Open Library to their library systems. The reach of the Open Library is global with nearly every country reporting adoptions.²⁶

Beyond B.C. and Ontario, coalitions of post-secondary institutions, educators, librarians, and students have worked to raise awareness, develop supports, and engage in advocacy for OER

- 20 Clinton, V. (2021). <u>Open pedagogy: A systematic review of empirical findings</u>. *Journal of Learning for Development*, 8(2), 255-268.
- 21 Clinton-Lisell, V., & Gwozdz, L. (2023). <u>Understanding student experiences of renewable and traditional assignments</u>. *College Teaching*, 71(2), 125-134.
- Ashman, M. (2023). <u>Faculty and student perceptions of open pedagogy: A case study from British Columbia, Canada</u>. *The Open/Technology in Education, Society, and Scholarship Association (OTESSA) Journal, 3*(2), 1-29.
- 23 Pakkal, O., Twele, A., Gwozdz, L., & Jhangiani, R. S. (2025). <u>An investigation into student perceptions of social justice</u> frames in a course syllabus. *Open Praxis*, *17*(3), 429-444.
- 24 See open.bccampus.ca/advocate-for-open-education/open-textbook-stats/
- 25 Jhangiani, R. S., Pakkal, O., & Xia, X. (2025). <u>The multi-year impact of Canada's first zero textbook cost initiative</u>. *Open Praxis*, 17(2), 326–348.

26 See openlibrary.ecampusontario.ca/impact

across Canada, including through regional initiatives such as <u>AtlanticOER</u> and <u>Alberta OER</u> <u>Community of Practice</u>, 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.²⁷ Specifically, the framework recognizes Canada's "responsibility to 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.

In 2025, BCcampus, Campus Manitoba, eCampusOntario, and Atlantic OER came together to form the Canadian Coalition of Affordable Learning (CCAL). CCAL aims to leverage interprovincial collaboration to make post-secondary education more accessible and affordable for Canadian students, with one of its focuses being the adoption and promotion of OER.

Growth and Institutionalization of OEP Initiatives

The relatively quick uptake of OEP across B.C. 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.

Starting in 2012 with the B.C. Open Textbook Project, BCcampus has provided centralized support, training, and infrastructure for open education in the province. This has included grants for open textbook adaptation and creation, as well as larger grants designed to allow institutions to develop and increase their own supports for open education. BCcampus has also maintained the B.C. Open Collection, hosted Pressbooks (an open-source self-publishing tool for OER), and developed training materials and guidelines for using, adapting, and creating accessible and inclusive OER.

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, in 2018 the University of British Columbia (UBC) published <u>UBC Strategic Plan 2018-2028 [PDF]</u> that included a commitment to continued growth in funding and support for the creation and dissemination of OER.²⁸ This followed the inclusion of language in UBC's guide to reappointment, promotion, and tenure procedures recognizing the publication of OER.²⁹ At KPU, KPU Academic Plan 2023 aimed for the institution to become an international leader

²⁷ McNally, M. & Ludbrook, A. (2023). <u>A national advocacy framework for open educational resources in Canada</u>.

²⁸ See UBC Strategic Plan 2018-2028

²⁹ Yano, B., Munro, D., & Coolidge, A. (2018). <u>University of British Columbia: Recognizing open in promotion and tenure</u>. *Educause Review*.

in open education research and practices, and <u>KPU Academic Plan 2027</u> now includes a commitment to expand KPU's role as a leader in open education. Finally, <u>Brock University's current academic plan</u> includes a goal to "support the creation, adaptation, and adoption of open educational resources" while <u>the collective agreement between Brock University and the Brock University Faculty Association [PDF]</u> 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.

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 B.C. institutions, such as UBC and the British Columbia Institute of Technology, have created open education working groups to develop and operationalize these strategies. Some, like KPU and Thompson Rivers University, have created dedicated support positions (usually located in the library or centre for teaching and learning) to support this work.

Similar work has happened systemically in British Columbia. B.C. Open Education Librarians (BCOEL) is a provincial community of practice consisting of librarians from across the B.C. post-secondary system that works to collaboratively support open education, create resources, share knowledge, and provide mutual support and mentorship.

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 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 research project was to assess and strengthen the capacity of public post-secondary institutions in B.C. to support OEP through a comprehensive, system-wide evaluation. It reflects the need to take an evidence-based approach to guiding and evaluating the development of effective institutional supports, including those relating to policies, professional development, partnerships, infrastructure, and leadership.

As part of the project, we implemented the second version of the *Institutional Self-Assessment Tool* (ISAT2) via an online survey distributed to all public post-secondary institutions in B.C. This assessment aimed to provide a detailed picture of the capacity to support OEP at each participating institution, as well as the sector as a whole. In doing so, the project contributes to capacity building across the sector while also advancing the goals outlined in the 2019 UNESCO Recommendation on Open Educational Resources (OER). This research replicates the methodology used in a parallel project conducted in Ontario³⁰, which assessed the capacity to support OEP across that province's colleges, universities, and Indigenous institutes.

The ISAT2 tool, which was designed to reflect the North American post-secondary landscape, evaluates institutional capacity for OEP across 23 dimensions organized under six thematic areas: a) vision and implementation; b) partnerships; c) policies, incentives, and professional development; d) institutional support; e) leadership and advocacy; and f) culture change.

Overview of ISAT2 Groupings and Dimensions



³⁰ Jhangiani, R., Pakkal, O., Lachaîne, C., & Luke, R. (2024). On a path to open: A report on the capacity of Ontario's post-secondary institutions to support open educational practices. Inclusive Education Research Lab & eCampusOntario.

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
- 3. **Stage of change:** assessment of the current stage of vision implementation, drawn from Prochaska and DiClemente's transtheoretical model of change ³¹
- **4. Impact evaluation:** assessment of the extent to which evaluation of OEP initiatives is being undertaken at the institution

Partnerships

- **5. 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
- 6. **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
- 7. **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

- 8. 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
- 9. 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.)
- **10. Professional development:** assessment of the extent to which the institution offers professional development opportunities related to OEP

³¹ Prochaska, J. & DiClemente, C. (1984). *The transtheoretical approach: Crossing the traditional boundaries of therapy.* Dow Jones/Irwin.

Institutional supports

- **11. Technology and other infrastructure:** assessment of the extent to which the institution possesses the infrastructure to support OEP
- **12. Resources/funding:** assessment of the extent to which the institution provides resources to support OEP
- 13. **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.)
- **14. Research support:** assessment of the extent to which the institution provides research support for OEP
- **15. 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

- **16. 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
- **17. OEP advocates:** determination of who are the OEP advocates at the institution (e.g., students, faculty, librarians, administrators, etc.)
- **18.** 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

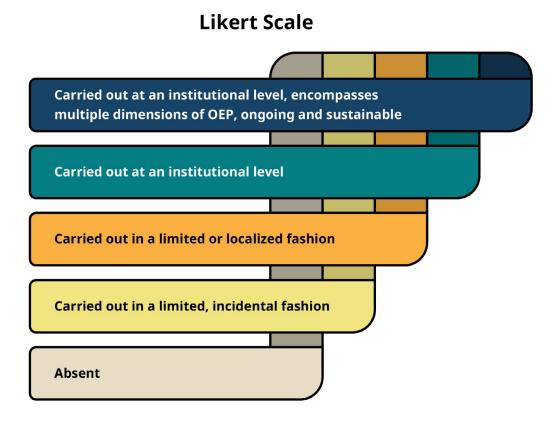
Culture change

- **19. Awareness:** assessment of the awareness of OEP across the institution
- **20. Use of provided institutional resources:** assessment of the extent to which faculty and staff are using resources made available to support OEP
- **21. Curriculum integration:** assessment of the extent to which courses and programs integrate OEP
- 22. 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.)
- **23. 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

Most dimensions of the ISAT2 are accompanied with a four- or five-point Likert scale that typically ascends from absent to institution-wide and ongoing/robust/sustainable.

These Likert scale responses were sometimes augmented with open-ended responses if participants wished to share details concerning specific manifestations. The final two dimensions (perceptions of change and barriers to change) were evaluated through reflections on open-ended prompts.



Procedure

Following approval from Brock University's research ethics board, participation was solicited from all public post-secondary institutions in B.C. Invited participants included institutional leads for open education initiatives (where applicable), or provosts/vice presidents academic or their designates, as identified by BCcampus. In addition to supporting participant identification, BCcampus promoted the study through its monthly newsletter, events, open education communities of practice, and other relevant channels.

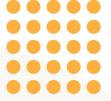
Invited participants received an email invitation containing a link (unique to their institution) to the online survey, which they were free to redirect to another institutional representative or designate. Access to the survey was granted only after the institutional respondent provided informed consent. The survey consisted of 28 items, including 23 multiple-choice and five open-ended questions, and took approximately 30 minutes to complete. Respondents could

save their progress and return later. For questions marked "do not know," participants were prompted to consult relevant institutional colleagues, if possible, before submitting the survey.

The survey remained open from January to April 2025 during which participants received up to three reminder emails spaced one month apart. Upon completion, participants were thanked and given the option to request a summary of the study's findings.

Survey Participation

Most of the invited B.C. public post-secondary institutions (20/26, 77%) completed the self-assessment instrument, including nine out of 11 colleges (82%), nine out of 12 universities (75%), and two out of three institutes (67%).



Survey Results

We have summarized the survey responses by separately considering each dimension of institutional capacity to support OEP. As with the ISAT2 itself, these responses are grouped within the six broad themes. In each case we summarized the overall responses for that dimension and commented on any observed differences in median responses by type of institution.

A. Vision and Implementation

1. Vision integration

Of the 19 institutions that responded to this question, the great majority (14/19, 74%) of them indicated that their institutional vision considers OEP to some extent, while five (26%) reported an absence of OEP in their institutional vision.

Specifically:

- Two universities (11%) reported that their institutional vision embraces OEP and is being studied/emulated by other institutions.
- One university (5%) reported that their institutional vision considers the need for changes in culture, policies, and practices to embrace OEP.
- Three institutions (16%, two colleges, one university) reported that their institutional vision considers how OEP supports existing learning and teaching practices.
- Eight institutions (42%, four colleges, three universities, one institute) reported that their institutional vision considers OEP in a limited, incidental, or informal fashion.

Vision Integration

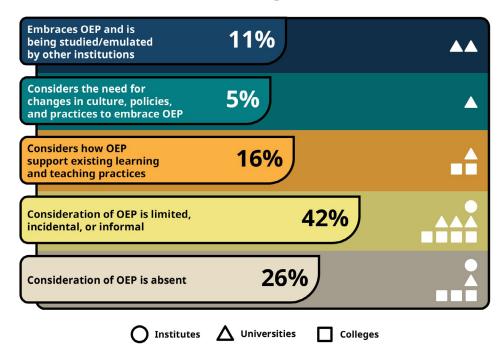


Figure 1: Integration of OEP in the institutional vision

Looking at median responses, universities reported somewhat greater integration of OEP with the institutional vision compared to colleges, followed by institutes.

When probed for specifics concerning the institutional vision for OEP, the most common responses referenced student success/educational achievement (13/19, 68%), followed by student savings (12/19, 63%), pedagogical innovation (11/19, 58%), educator flexibility (9/19, 47%), resource/cost saving on development of materials and services (9/19, 47%), student engagement (7/19, 37%), student retention (5/19, 26%), quality improvements (4/19, 21%), student enrolment (3/19, 16%), service mission (3/19, 16%), and university reputation (2/19, 11%).

Among the other reasons cited as the thrust of the institutional vision for OEP were:

- Supporting accessibility of learning materials
- Supporting equity, diversity, and inclusion (EDI) in learning materials
- Retaining faculty intellectual property (IP)
- A lack of institutional vision with OEP advocacy occurring at an individual or grassroots level

2. Vision implementation

Overall, many institutions reported either having no action plan (6/20, 30%) or only limited, incidental, or informal implementation (7/20, 35%) of their envisioned role of OEP, while fewer reported broader or more advanced implementation.

Specifically:

- One university (5%) reported that implementation is occurring across the institution and beyond, at a regional, national, or international level.
- Four universities (20%) reported that implementation is occurring across the institution.
- Two colleges (10%) reported that implementation is occurring within specific areas of the institution.
- Seven institutions (five colleges, two universities, 35%) reported limited, incidental, or informal vision implementation.
- Six institutions (two colleges, two universities, two institutes, 30%) reported an absence of an action plan for implementation of OEP vision.

Looking at median responses, universities reported greater implementation of their OEP vision than colleges and institutes.

Vision Implementation

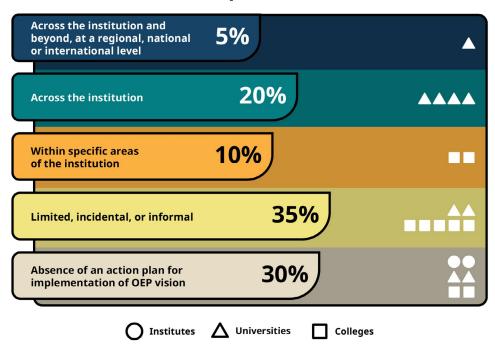


Figure 2: Implementation of institutional vision for OEP

3. Stage of institutional vision implementation

Of the 19 institutions that responded, the largest group reported being in the **contemplation** stage (8/19, 42%), indicating an intention to implement their vision in the medium term but with some ambivalence. Three institutions each were in the **precontemplation** stage (16%), **preparation** (**determination**) stage (16%), and **action** stage (16%), while two institutions (11%) were in the **maintenance** stage, having sustained implementation for a significant period.

Stage of Institutional Vision Implementation

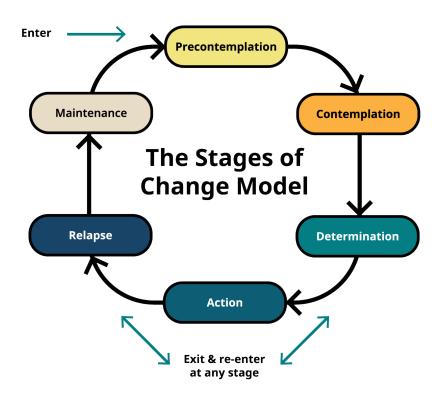


Figure 3. Stage of institutional vision implementation (from Prochaska & DiClemente, 1984)

With respect to the stage of institutional vision implementation for OEP, the median response varied by institution type.

Among institutes, the median response fell between the precontemplation and contemplation stages of the transtheoretical model of change. This indicates a range between having no current intention to implement the vision and having a medium-term intention to do so, accompanied by some ambivalence despite recognizing the need for action.

For colleges, the median response was at the contemplation stage, reflecting a general awareness of the importance of OEP and an intention to implement it in the medium term, though planning and action had not yet been broadly initiated.

Among universities, the median response was between the *preparation* and *action* stages. This reflects a higher level of readiness with institutions indicating short-term plans or having already begun taking concrete steps toward implementing their OEP vision.

4. Evaluation of impact

Most institutions (16/20, 80%) reported that they were undertaking evaluation efforts.

Specifically:

- None of the institutions 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.
- Two universities (10%) reported that formal evaluation of OEP initiatives and their impact is carried out at an institutional level and informs future planning.
- Nine institutions (four colleges, four universities, one institute, 45%) 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).
- Five institutions (three colleges, two universities) reported limited, incidental, or informal evaluation of OEP impact (e.g., individual educators may survey their students).
- Four institutions (two colleges, one university, one institute, 20%) reported an absence of evaluation of OEP initiatives and their impact.

Looking at the median scores, universities scored higher with a median of three, indicating a more formal evaluation of OEP initiatives and their impact, compared to colleges and institutes, both of which had a median of two, reflecting limited, incidental, or informal evaluation efforts.

Evaluation of Impact

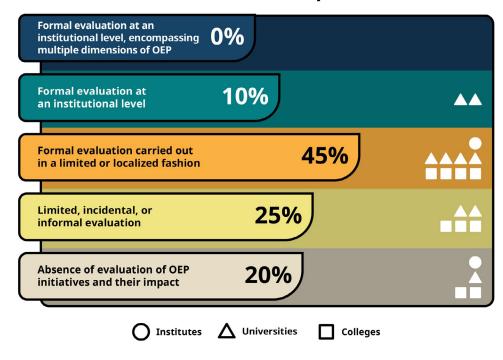


Figure 4: Evaluation of impact of OEP initiatives

B. Partnerships

5. Student partnerships

Of the 19 institutions that responded to this question, the vast majority (16/19, 84%) reported that they were engaging in student partnerships to support OEP.

Specifically:

- One university (5%) reported that student partnerships are embraced across the institution and structurally integrated (e.g., during program review/development or supported through fellowships).
- Three institutions (one college, two universities, 16%) reported that student partnerships are embraced across the institution.
- Four institutions (one college, one institute, two universities, 21%) reported having student partnerships that are localized within specific areas of the institution (e.g., one or more faculties or departments).
- Eight institutions (four colleges, one institute, three universities, 42%) reported having limited, incidental, or informal student partnerships in OEP (e.g., limited to one-off projects or ad hoc faculty initiatives).
- Three colleges (16%) reported having no student partnerships to support OEP.

Looking at the median scores, universities reported higher engagement in student partnerships, followed by institutes and colleges.

Student Partnerships

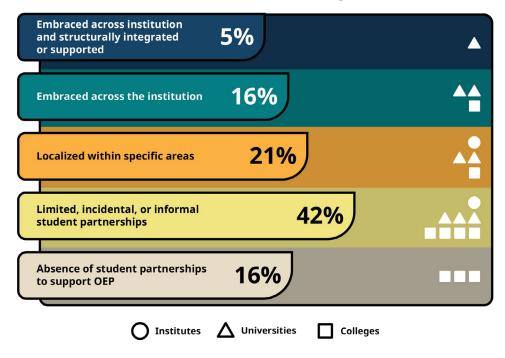


Figure 5: Student partnerships to support OEP

When asked about the nature of student partnerships in support of OEP, respondents described a range of activities with course-based open pedagogy emerging as the most common. For example, students frequently engaged in creating blogs, modifying open textbooks, or other classroom-based OEP activities, although they were often unaware that these contributions were part of a broader open education initiative. These efforts were typically led by individual instructors and were not embedded within institutional strategy.

Advocacy and awareness-building also featured prominently, particularly through student unions or societies that promoted OEP and campaigned for the use of OER instead of commercial textbooks. However, many institutions noted that student involvement in OEP was minimal or consultative rather than collaborative, with previous grant programs involving students in OER development often halted due to institutional barriers.

In a few instances, students had authored and published OERs or portfolios under Creative Commons licences, and alumni returned to contribute to events tied to institutional OEP work. Nonetheless, the distinction between faculty-driven initiatives and authentic partnerships remained clear; in most cases, students were positioned as helpers or research assistants rather than equal collaborators. Only one institution reported a truly equitable student-aspartner OER grant program.

Overall, colleges reported examples of course-based pedagogy, student union advocacy, and past hiring of students for OEP projects — although many of these had been discontinued — and noted limited consultation or authorship by students. In contrast, universities reported more formal student partnerships, including representation on committees, involvement in OER award adjudication, co-op students acting as research assistants, active alumni engagement, and at least one student-partnered OER development initiative.



6. Internal partnerships

6a. Library

Of the 18 institutions that responded to this question, all (100%) reported at least one internal partnership, specifically with the library, to support OEP.

Specifically:

- Seven institutions (three colleges, four universities, 39%) reported that library partnerships are ongoing, sustainable, and reflective of a long-term institutional commitment to OEP.
- Six institutions (three colleges, one institute, two universities, 33%) reported that library partnerships are localized within specific areas of the institution or limited to a specific term or project.
- Two institutions (one college, one university, 11%) reported that library partnerships are limited to one-off projects or ad hoc collaborations.
- Three institutions (one college, one institute, one university, 17%) reported limited, incidental, or informal library partnerships (e.g., individual library staff collaborating on a one-off OEP initiative).

Looking at the median scores, universities reported higher levels of engagement in their internal partnerships with the library to support OEP. Colleges and institutes followed, with partnerships that were generally more limited in scope.

Internal Partnerships: Library

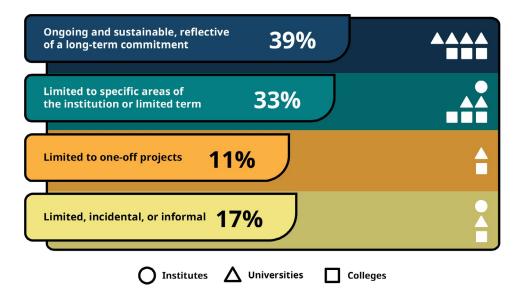


Figure 6: Partnerships with the library to support OEP

6b. Centre for teaching and learning

Of the 18 institutions that responded to this question, all (100%) reported having some form of internal partnership with their centre for teaching and learning (CTL) to support OEP.

Specifically:

- Six institutions (two colleges, four universities, 33%) reported that CTL partnerships are ongoing, sustainable, and reflective of a long-term institutional commitment to OEP.
- Four institutions (two colleges, two universities, 22%) reported that CTL partnerships are ongoing but limited to specific areas of the institution or are limited in duration.
- Five institutions (three colleges, one institute, one university, 28%) reported that CTL partnerships are limited to one-off projects or ad hoc collaborations.
- Three institutions (two colleges, one university, 17%) reported limited, incidental, or informal CTL partnerships (e.g., individual relationships or small-scale support).

Looking at median scores, universities tended to report stronger, more sustained partnerships in support of OEP with their CTLs. In contrast, colleges and universities had the same median score, but their partnerships with CTLs were mostly limited to one-off projects, indicating room for growth in institutional commitment to OEP through CTL engagement.

Internal Partnerships: Centre for Teaching and Learning

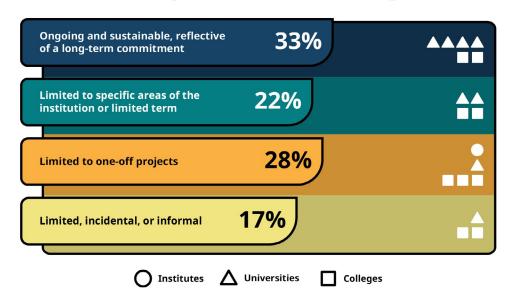


Figure 7: Partnerships with the centre for teaching and learning to support OEP

6c. Office of the registrar

Five institutions reported having some level of internal partnership with the office of the registrar to support OEP.

Specifically:

- Two institutions (one college, one university, 40%) reported that partnerships with the office of the registrar are ongoing, sustainable, and reflective of a long-term institutional commitment to OEP.
- One university (20%) reported that partnership is ongoing but limited to specific areas of the institution or limited in duration.
- Two institutions (one institute, one university, 40%) reported limited, incidental, or informal partnerships with the office of the registrar (e.g., individual relationships or isolated collaborations).

Internal Partnerships: Office of Registrar

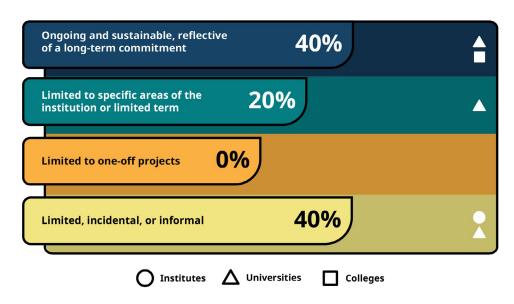


Figure 8: Partnerships with the office of the registrar to support OEP

Partnerships differed by institution type. Though response rates were low (one college, one institute, and three universities responded), the one college that reported a partnership with their registrar's office indicated an ongoing and sustainable partnership. The only institute that reported a partnership with the office of the registrar reported a limited, incidental, or informal partnership.

6d. Campus store

Seven institutions reported having some form of internal partnership with the campus store to support OEP.

Specifically:

- Three institutions (two colleges, one university, 43%) reported that campus store partnerships are ongoing, sustainable, and reflective of a long-term institutional commitment to OEP.
- Two institutions (one college, one university, 29%) reported limited, incidental, or informal partnerships with the campus store (e.g., individual relationships or informal support).
- One college (14%) reported that their partnership is ongoing but limited to specific areas of the institution or limited in duration.
- One university (14%) reported that their partnership was limited to one-off projects or ad hoc collaborations.

Internal Partnerships: Campus Store

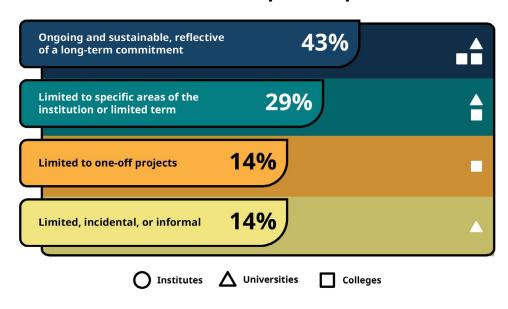


Figure 9: Partnerships with the campus store to support OEP

Looking at median scores, colleges tended to report stronger partnerships with their campus store.

6e. Additional internal partnerships

When asked to identify additional internal partnerships within their institutions that support OEP, five institutions responded affirmatively.

Three of these institutions described ongoing, sustained, and formal collaborations with multiple internal units, indicating a strong and embedded institutional commitment to OEP. One institution noted a one-time, project-based partnership with the student union, suggesting more limited but targeted support. Another institution reported a partnership with the office of the provost though the specific nature and extent of support were not detailed.

The types of internal partners cited by the responding institutions included student government or associations, IT services, accessibility services, faculty or departmental support units, research offices, open learning divisions, institutional research offices, and institutional leadership (e.g., office of the provost).

The specific nature of support varied and included student involvement and leadership; grant funding and adjudication support; technical support; instructional and curriculum support; policy integration and collaborative governance; advocacy; OER awareness and cost-saving focus; OEP dissemination; data collection and reporting (e.g., ZTC course markings); OER/ZTC implementation support; and project-based collaboration.

7. External partnerships

Of the 19 institutions that responded to this question, the great majority (15/19, 79%) reported that they were engaging in some form of external partnership to support OEP.

Specifically:

- One university (5%) reported that external partnerships are ongoing, sustainable, and reflect a long-term commitment to supporting OEP.
- Three institutions (two colleges, one university, 16%) reported that external partnerships are ongoing but limited to specific areas of the institution or are limited in duration.
- Six institutions (four colleges, two universities, 32%) reported that external partnerships are limited to one-off projects (e.g., co-organizing workshops, collaborating on resource development, or joint research).
- Five institutions (two colleges, three universities, 26%) reported limited, incidental, or informal external partnerships (e.g., bringing in guest speakers, attending external events, or individual connections).
- Four institutions (one college, one institute, two universities) reported no external partnerships to support OEP.

Looking at median scores, colleges scored slightly higher than universities on their external partnerships, followed by institutes.

External Partnerships

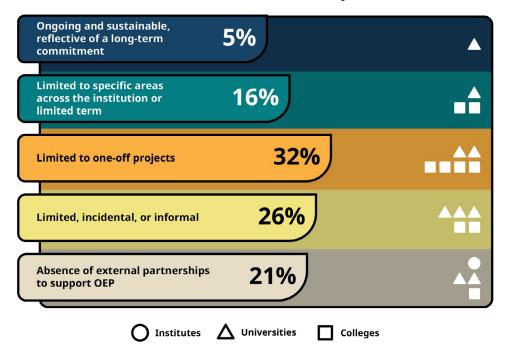
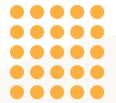


Figure 10: External partnerships to support OEP

When probed about the specific external partnerships that support OEP in their institutions and the expectations for each, twelve institutions responded. All twelve reported having at least one external partnership in place to support OEP efforts.

- 11 responses mentioned BCcampus as a key external partner indicating a high level of regional reliance on this organization for tools, funding, training, and general support.
- Five responses referred to regional OER networks, such as B.C. Open Education Librarians, B.C. Open Education Community, and ETUG Educational Technology Users Group.
- Two responses mentioned the Open Ed Tech Collaborative (OpenETC) as a partner supporting technical tools (e.g., WordPress, H5P).
- One response mentioned the OERu as a partner institution.
- One response indicated a partnership with other B.C. post-secondary institutions for joint projects.

The specific nature of support across responses included funding opportunities (grants, event support); professional development (in-person/ online training); access to tools and shared services (Pressbooks, H5P); participation in communities of practice; support for events and guest speakers; advice and encouragement; institutional partnership recognition; job role integration (OER as part of librarian responsibilities).



C. Policies, Incentives, and Professional Development

8. Policies

Of the 19 institutions that responded to this question, a slight majority (10/19, 53%) indicated some degree of policy support for OEP.

Specifically:

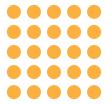
- One university (6%) reported that there is an alignment of institutional vision and policies with procedures and practices that support OEP.
- One university (6%) reported that policies supporting OEP are fully developed and implemented across the institution.
- Two colleges (11%) reported that OEP-supportive policies have been developed and implemented within specific areas or levels of the institution (e.g., within one or more faculties or departments).
- Six institutions (two colleges, four universities, 33%) reported that policies supporting OEP are limited, incidental, or informal — often led by pioneering individuals or groups in the early stages of policy development.
- Eight institutions (five colleges, two institutes, one university, 44%) reported no policies to support OEP.

Looking at the median scores, universities reported higher scores on having policies to support OEP, followed by colleges and institutes.

Policies Alignment of institutional 6% vision and policies with procedures and practices Developed and implemented 6% across the institution **Developed and implemented** 11% within specific areas or levels of the institution Limited, incidental, informal, 33% or under development Absence of policies to support OEP **△** Universities Institutes Colleges

Figure 11: Institutional policies to support OEP

When asked to list specific policies that support OEP in their institutions, eight institutions responded. Five institutions reported having formal policies that supported OEP, including copyright policy, library strategy, academic policy, institutional policy, and internal grant policy. One institution described an informal guideline where consultation with an OER coordinator is required for internal funding applications. One institution reported that their policy is in development as indicated by a senate-endorsed statement of support. Finally, one institution reported no formal polices though its teaching, learning, and research model expresses general support for openness.



9. Incentives

A slight majority of responding institutions (11/20, 55%) reported having some form of incentives or rewards for engaging with OEP.

Specifically:

- One university (5%) reported incentives or rewards for engaging with OEP at a regional, national, or international level.
- Four (one college, three universities, 20%) institutions reported incentives or rewards for engaging with OEP at the institutional level.
- One university (5%) reported incentives or rewards within specific areas of the institution (e.g., within one or more faculties or departments).
- Five institutions (three colleges, two universities, 25%) reported having limited, incidental, or informal incentives or rewards for engaging with OEP.
- Nine institutions (five colleges, two institutes, two universities, 45%) reported no incentives or awards for engaging with OEP.

Looking at median scores, universities reported more incentives for engaging in OEP.

At a regional, national or 5% international level 20% At the institutional level Within specific areas of 5% the institution 25% Limited, incidental, or informal Absence of incentives or 45% rewards for engaging with OEP Institutes **⚠** Universities Colleges

Incentives

Figure 12: Incentives or rewards for engaging with OEP

When asked about what types of incentives are available to faculty and staff for implementing open educational practices, 14 institutions responded.

Over half of the institutions (8/14) reported offering informal recognition such as faculty profiles or celebratory events. Grants were the next most common incentive, available at six institutions (43%) where they are often used to hire student assistants or support project development. Monetary incentives, such as stipends, were reported by four institutions (29%). Three institutions (21%) indicated a reduction in teaching load to provide time for OEP work, and an equal number noted the establishment of formal awards. Finally, just two institutions (14%) recognized OEP contributions during tenure and promotion processes, suggesting this remains a relatively uncommon practice.

Three institutions selected the "other (please specify)" option. Of these, one institution cited that the support was based on goodwill and project assistance from teaching and learning centres or libraries. Another institution noted that monetary incentives were previously available but had been discontinued due to budget cuts. The third institution reported that it had previously offered OER grants that included the option of course releases and funding to hire student assistants, but that this program ended in 2024.

When comparing colleges and universities, some differences emerged: half of the responding colleges (3/6) reported informal recognition, followed by monetary incentives (2/6), while grants and formal awards were each mentioned by only one college. In contrast, universities more frequently reported grants and informal recognition (5/8), and three universities offered a reduction in teaching load. Monetary incentives and formal awards were noted by two universities each. Finally, recognition during tenure and promotion was reported only by universities.

10. Professional development

Nearly all responding institutions (18/20, 90%) reported offering some form of professional development related to OEP.

Specifically:

- No institutions reported that professional development for OEP is integrated and embraced across the institution.
- Seven institutions (two colleges, one institute, four universities, 35%) reported that professional development on OEP is offered across the institution.
- Seven institutions (three colleges, one institute, three universities) reported that some professional development on OEP is occurring, but it is localized to specific areas of the institution (e.g., within one or more faculties or departments).
- Four colleges (20%) reported that professional development on OEP is limited, incidental, or informal (e.g., educators may use personal development funds or engage on their own initiative).
- Two universities (10%) reported having no professional development opportunities related to OEP.

Looking at median responses, universities and colleges indicated similar levels of engagement with offerings mostly localized to specific areas within the institution. Among the two participating institutes, one reported localized opportunities, whereas the other described professional development as being offered more broadly across the institution.

Professional Development

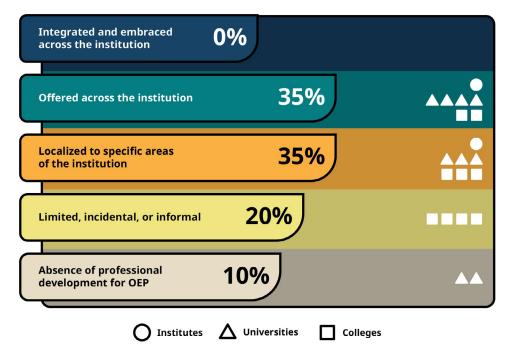


Figure 13: Professional development on OEP

D. Institutional Supports

11. Technology and other infrastructure

Nearly all responding institutions (19/20, 95%) reported that some form of infrastructure exists to support OEP.

Specifically:

- Five institutions (one institute, four universities, 25%) reported robust infrastructure to support OEP across the institution (e.g., systems in place for OER publishing and broad integration).
- Nine institutions (five colleges, four universities) reported having basic infrastructure
 available across the institution (e.g., technologies and systems to support integration of
 OER in the learning environment).
- One university (5%) reported infrastructure localized to specific areas of the institution (e.g., within faculties or departments).
- Four colleges (20%) reported limited, incidental, or informal infrastructure to support OEP (e.g., individual faculty members may have subscribed to relevant technologies).
- One institute reported an absence of infrastructure to support OEP.

Looking at the median scores, colleges and universities were aligned with most reporting basic infrastructure available across the institution. Institutes, however, showed more variability, either reporting robust, institution-wide infrastructure or a complete absence of infrastructure to support OEP.

Technology and Other Infrastructure

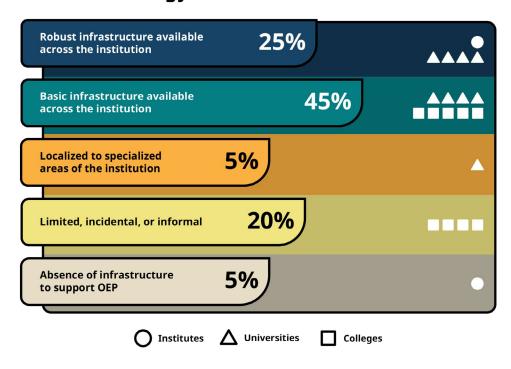


Figure 14: Technology and other infrastructure to support OEP

12. Resources/funding

The majority of institutions (17/20, 85%) reported that some form of resources or funding exist to support OEP.

Specifically:

- Two universities (10%) reported robust resources to support OEP across the institution (e.g., significant funding available for OER creation and open pedagogy initiatives).
- Five institutions (two colleges, three universities, 25%) reported that basic resources are available across the institution (e.g., small OER grant programs).
- Two institutions (one college, one university, 10%) reported that resources are localized to specific areas of the institution (e.g., within certain faculties or departments).
- Eight institutions (five colleges, two universities, one institute, 40%) reported limited, incidental, or informal resources to support OEP (e.g., individual faculty members may be drawing on existing professional development funding).
- Three institutions (one college, one university, one institute, 15%) reported no resources to support OEP.

Looking at the median scores, universities reported providing more resources or funding to support OEP followed by colleges and institutes.

Resources/Funding

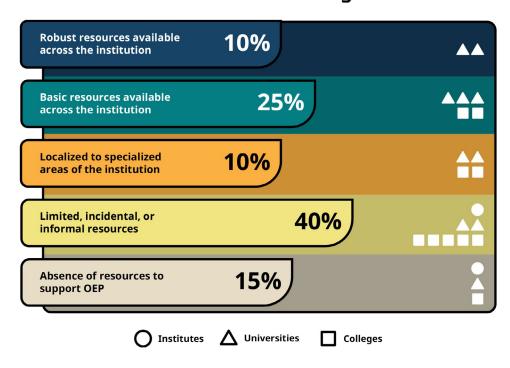


Figure 15: Resources or funding to support OEP

13. Institutional supports

When asked about the specific types of institutional assistance available to support open educational practices, 20 institutions responded and identified a wide range of supports. What follows is a summary of the types of support identified, organized by frequency of response:

Most frequently mentioned supports

- Discovering OER (e.g., support from the library) (20 mentions)
- Designing and implementing open pedagogy (e.g., support from the centre for teaching and learning) (17 mentions)
- Technical assistance with using technologies/platforms to support OEP (17 mentions)
- Access to technologies/platforms to support OEP (e.g., Open Journal Systems, Pressbooks, H5P, WeBWorK, etc.) (16 mentions)
- Hosting and showcasing OER (e.g., institutional open repository) (15 mentions)
- Internal professional development (e.g., workshops on Creative Commons, OER, pedagogy) (13 mentions)
- Dedicated staff positions to support OEP (e.g., OER librarian, open education strategist)
 (10 mentions)
- Supports for open access scholarship (e.g., self-archiving, APC waivers) (9 mentions)
- Support for professional development outside the institution (e.g., conferences, courses) (9 mentions)

Less frequently mentioned supports

- Dedicated funding/grant programs (e.g., OER grants, fellowships) (5 mentions)
- OER publishing programs (e.g., design, editing, multimedia, peer review) (4 mentions)
- Supports for open science practices (e.g., Center for Open Science membership) (2 mentions)
- Supports for open education research (e.g., internal grants or fellowships) (2 mentions)
- Institutional membership in relevant organizations (e.g., Open Education Global) (2 mentions)

Other supports

When given the opportunity to list any other types of institutional assistance available to support OEP, one institution noted accessibility support for developing or adapting OER, as well as one-on-one consultation support for OEP.

14. Research support

Of the 18 institutions that responded to this question, a majority (10/18, 56%) reported an absence of internal research support for OEP.

Specifically:

- No institutions reported support at all stages, including funding, proposals, and project implementation and reporting.
- One college (6%) reported providing more comprehensive support, including preparation
 of research proposals, identifying external funding opportunities, literature review, and
 feedback on design/methods.
- One university (6%) reported that support includes identification and promotion of research funding for OEP.
- Six institutions (four colleges, two universities, 33%) reported limited research support, primarily administrative in nature (e.g., support with research agreements, contracts, or funding proposal submissions).
- 10 institutions (three colleges, five universities, two institutes, 55%) reported no research support.

Looking at median responses, colleges reported offering slightly more research support for OEP.

Research Support

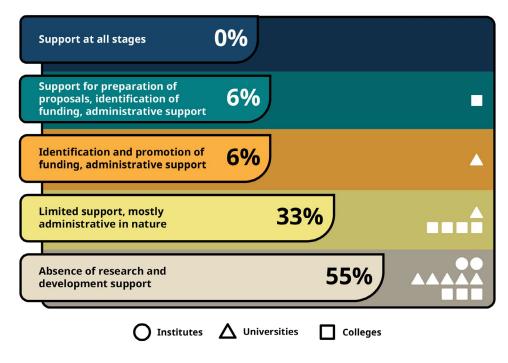


Figure 16: Institutional research support for OEP

15. Communication

All 20 institutions reported having communication channels in place to support OEP. While just under half (9/20, 45%) indicated that formal communication channels are used across the institution, many institutions (8/20, 40%) reported using limited, incidental, or informal communication channels (e.g., email, direct messaging).

Specifically:

- One university (5%) reported that communication about OEP also extends beyond the institution to regional, national, or international networks.
- Nine institutions (four colleges, four universities, one institute, 45%) reported using formal communication channels across the institution (e.g., newsletters, webpages, email lists, press releases).
- Two institutions (one college, one university, 10%) reported using formal channels within specific areas of the institution (e.g., individual departments or faculties).
- Eight institutions (four colleges, three universities, one institute, 40%) reported using limited, incidental, or informal communication channels.
- No institutions reported an absence of communication challenges to support OEP.

Looking at median scores, universities were slightly ahead of colleges and institutes in establishing formal communication channels to support OEP.

Formal channels used across the 5% institution; updates distributed beyond the institution Formal channels used 45% across the institution Formal channels used 10% within specific areas of the institution Limited, incidental, 40% or informal channels Absence of communication 0% channels to support OEP Institutes ▲ Universities Colleges

Communication

Figure 17: Communication support for OEP

E. Leadership and Advocacy

16. Leadership structure

Most institutions (18/20, 90%) reported having some form of leadership structure to support OEP, whether this was more informal, included dedicated positions, or involved senior leadership.

Specifically:

- Two institutions (one college, one university, 10%) reported having a senior leader in the institutional structure who leads the OEP initiative with support from a specialized centre.
- No institutions reported having a specialized centre.
- Six institutions (two colleges, three universities, one institute, 30%) reported that one or more dedicated positions have been created to support OEP within units such as the library or centre for teaching and learning.
- 10 institutions (six colleges, four universities, 50%) reported having limited, incidental, or informal structures (e.g., faculty champions, communities of practice).
- Two institutions (one university, one institute, 10%) reported having an absence of institutional structure to support OEP.

Looking at median responses, there were no significant differences across types of institutions.

Leadership Structure

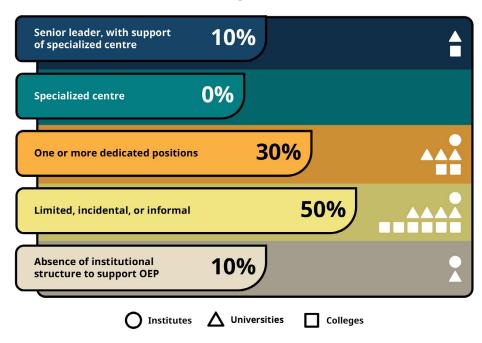


Figure 18: Leadership structure to support OEP

17. OEP advocates

When asked about who advocates for OEP at their institution, the most common responses were librarians (17/20, 85%) and support staff from units such as the centre for teaching and learning or library (17/20, 85%). Faculty advocates were reported by 13 institutions (65%) and administrator advocates (e.g., deans, associate deans, senior leadership, etc.) by 10 institutions (50%). Student advocates were also mentioned by 10 institutions (50%). Advocates from multiple internal groups such as an open education working group or committee were reported by six institutions (30%), while external advocates (e.g., external organizations, government, etc.) were the least frequently identified (5/20, 25%), indicating that advocacy for OEP remains largely internal.

Colleges showed the broadest range of advocacy with strong representation from faculty (7), librarians (8), support staff (7), and administrators (6). They also reported student advocates (5), internal group advocates (3), and some external advocates (2), suggesting a well-rounded internal support system.

Universities also demonstrated diverse advocates for OEPs with high counts for support staff (9) and librarians (8), followed by faculty (6), students (6), and administrators (4) as advocates. They reported slightly more external (3) and internal (3) group advocates than colleges, indicating a mix of formal and informal structures.

Institutes, by contrast, reported fewer types of advocates with support staff (2) and librarians (1) being the only groups mentioned. This suggests a more limited advocacy landscape, possibly reflecting less formalized OEP engagement.



18. Adequacy of provided institutional resources

Of the 19 institutions that responded to this question, the majority (14/19) reported that their senior leadership provides some institutional resources, whether financial, human, or capital, to support OEP.

Specifically:

- One university (5%) reported providing substantial resources to support institutionwide uptake
- Four institutions (two colleges, two universities, 21%) reported providing adequate resources to support institution-wide uptake.
- Nine institutions (four colleges, four universities, one institute, 47%) reported providing limited resources that were insufficient to support institution-wide uptake.
- Five institutions (three colleges, one university, one institute, 26%) reported providing no or minimal resources.

Looking at median responses, colleges and universities reported providing slightly more institutional resources to support OEP.

Adequacy of Provided Institutional Resources

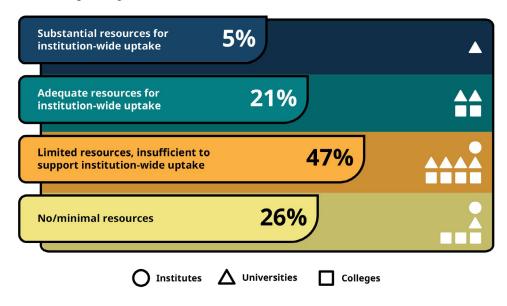


Figure 19: Adequacy of provided institutional resources to support OEP

F. Culture Change

19. Awareness

All institutions (20/20) reported some level of institutional awareness of open educational practices. A slight majority (11/20, 55%) indicated that awareness is between moderate and widespread across the institution, suggesting growing institutional engagement with OEP.

Specifically:

- Two universities (10%) reported widespread awareness across the institution.
- Nine institutions (five colleges, three universities, one institute, 45%) reported moderate awareness across the institution.
- Three institutions (two colleges, one university, 15%) reported awareness limited to specific areas of the institution (e.g., one or more faculties or departments).
- Six institutions (two colleges, three universities, one institute, 30%) reported awareness limited to individual champions.
- No institutions reported little to no awareness.

Looking at median responses, colleges and universities reported somewhat greater institutional awareness of OEP.

Widespread awareness 10% across the institution **Moderate awareness** 45% across the institution Limited to specific areas 15% of the institution 30% Limited to individual champions 0% Little to no awareness Institutes Colleges

Awareness

Figure 20: Institutional awareness of OEP

20. Use of provided institutional resources

Most institutions (16/20, 80%) reported some level of uptake of available resources by faculty and staff to support OEP.

Specifically:

- Two universities (10%) reported stronger demand for resources than can be sustained.
- One university (5%) reported significant uptake that demonstrates a strong return on investment.
- 13 institutions (seven colleges, six universities, 65%) reported sufficient uptake that justifies provision of ongoing support.
- Four institutions (two colleges, two institutes, 20%) reported little to no uptake.

Looking at median responses, colleges and universities reported greater use of institutional resources to support OEP.

Use of Provided Institutional Resources

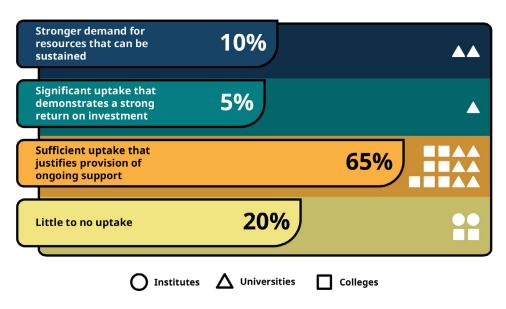


Figure 21: Use of provided resources to support OEP

21. Curriculum integration

All responding institutions (19/19, 100%) reported some level of integration of OEP into courses and programs.

Specifically:

- No institutions reported OEP integrated into a large number of courses, in many cases at the program level.
- Three institutions (one college, one university, one institute, 16%) reported that OEP is integrated into a large number of courses and, in many cases, at a program level.
- Three institutions (one college, two universities, 16%) reported that OEP is integrated into many courses, but not yet at a program level.
- 13 institutions (seven colleges, five universities, one institute, 68%) reported that individual educators are experimenting with OEP in their courses.
- No institutions reported that there is no integration of OEP in courses and programs.

Looking at median responses, there were no significant differences across types of institutions.

Curriculum Integration

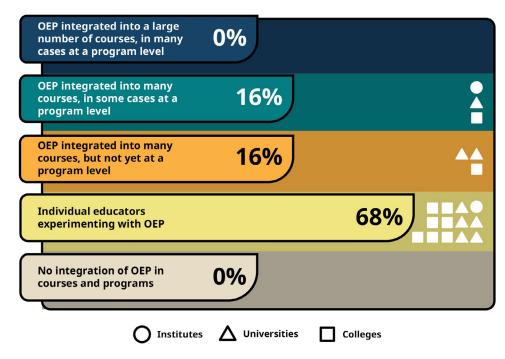


Figure 22: Integration of OEP into courses and programs

22. Perceptions of change in attitudes towards teaching and learning

When asked whether they had observed any changes in attitudes toward OEP at their institutions, 16 institutions responded. Of these, most (13/16, 81%) reported a positive shift in attitudes. Cited evidence of this shift included increased faculty engagement, rising interest in grants and open pedagogy, and growing institutional efforts to integrate OEP into curriculum and program planning. Other indicators of this shift included more professional development participation, more tools usage like H5P, WordPress, and WeBWorK, and the formation or re-activation of support structures such as OEP advisory committees and communities of practice. Several indicators also pointed to enhanced library support, growth in student advocacy, and recognition of OEP efforts in tenure and promotion processes. However, within this group experiencing positive change, four institutions also raised specific and associated concerns such as limited administrative coordination, lack of dedicated staffing, and faculty time constraints.

Three institutions (19%) reported no significant change or a decline in support for OEP. Common barriers in these cases included limited awareness, minimal leadership attention, discontinued incentives (such as stipends), and the absence of OEP in institutional strategic plans.

The following are excerpts of representative responses concerning indicators of change:

"More awareness, more attendance at info sessions, more use of H5P, WordPress, WeBWorK as each year grows mainly due to teaching and learning centre leader. Program review and a renewed professional development plan and accountable impacts of PD [professional development] has driven up interest in other learning experiences and given many 'permission' to explore transformative practices for student learning."

"While a good number of faculty use OER in their course, I believe more faculty are now also interested in other aspects of OEP like open pedagogy. We have many instructors who have maintained their commitment long term to adopting OEP, we also continue to have conversations with people who are interacting with OEP for the first time. This year we have had more consultations about grant funding for OER and we are recording the highest numbers of OER adoption in the history of our record keeping. We are working to see these conversations happen on a program wide level to a greater extent."

"There is both growing awareness and interest in OEP at our institution as evidenced by increasing support requests for OER and open pedagogy support as well as steady levels of grant and award applications related to OEP. The provost's office provides strong leadership and support for OEP and while anecdotal evidence suggests that most faculty support OEP principles and recognize the importance of affordable course resources."

"Have seen more applications to develop OER by faculty and increased student advocacy."

"There has been an increase in library instructional support for OEP related to zines, digital projects, podcasts, etc."

"I believe the level of interest in OEP is continuing to grow amongst faculty, especially in the age of Generative AI and pressing global issues."

"More awareness by faculty that they are doing OEP even if they hadn't called it that."

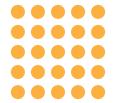
Other prominent themes included integration of consideration for OEP during institutional processes and practices such as program review and course marking, senior leadership support, and other priorities or incentives that elevate support for OEP. For example:

"There have been conversations with our quality assurance office to ensure OER/ZTC is in the list of considerations during program review. We are working on having OER/ZTC considered at all stages of program planning, etc. And in addition are working on ways to ensure students are aware before registering for courses which courses are ZTC or using Open Textbooks.

"We are currently working towards building (or re-building) our capacity for OER/ OEPs under the VP Academic's direction."

"Tenure and promotion recognition has really helped with changing attitudes towards OEP."

"More awareness and interest in accessibility and UDL [Universal Design for Learning]."



23. Perceptions of barriers to change

The most prominent theme that emerged among reported barriers to change was inadequate staffing or capacity.

"I am essentially the only person who supports open education initiatives at [institution] and I do this work off the side of my desk, because I believe in its value. For this reason, I can only offer limited PD opportunities throughout the academic year. That said, these sessions are usually well attended, especially when they are integrated into [institution]-wide events such as the institution's mini conference. Faculty tell me they feel inspired and reinvigorated by OEP."

"There has been slow growth in OEP. There is potential for more targeted OEP/OER promotion at the program level, but a lack of staffing to oversee sustained project management of any such initiatives."

"Growth and awareness are slow, but are happening despite having no formal dedicated support at the institution."

"Our institution has been supportive of OEP in principle, but has lacked in having a specific person (or people) to keep it going from the administration side."

Other themes included a decline in funding, absence of leadership support, awareness of OEP, literacy concerning copyright and open licensing, and time for faculty to devote to OEP.

"Faculty stipends were a huge driver for interest and adoption of OEP. This funding has dried up, and we as support staff/faculty are trying to regroup."

"A significant barrier to implementation of OEP is the severe time constraints faced by faculty."

"Getting open education in a strategic plan would be huge, but so far we haven't had luck, and a 2025-2030 plan was just published with no mention of OEP."

"OEP never seems to be on senior leadership's radar"

"Lack of awareness, lack of understanding about creative commons licensing and copyright."

Overall Trends

Dimensions of support for OEP: Median institutional responses

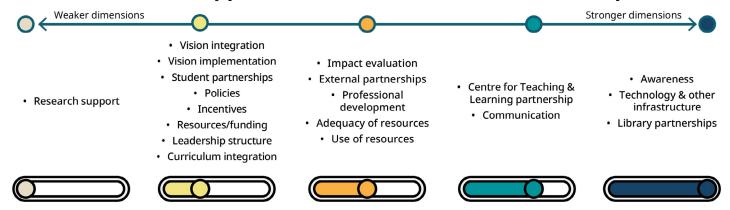


Figure 23: Depiction of the relative strength of the various dimensions of support for OEP based on median institutional responses

Looking across the various dimensions of internal capacity to support OEP, public post-secondary institutions across B.C. are strongest when it comes to awareness of OEP, library partnerships (which likely play a strong role in elevating awareness), and technology and other infrastructure to support OEP. The strong partnerships with libraries are followed closely by robust partnerships with centres for teaching and learning, which often play central roles when it comes to the educational technologies that underpin OEP, as well as the embrace of open pedagogies. A notable strength in B.C., and one not always seen in other jurisdictions, concerns formal and institution-wide communications concerning OEP.

There was only moderate institutional support across the sector for professional development and external partnerships related to OEP. Moderate levels of adequacy of resourcing for OEP are also reflected by moderate use of the resources. The absence of a systematic approach to evaluation of the impact

of OEP also appears to be a missed opportunity as proper evaluation of OEP initiatives could demonstrate the strong return on investment (ROI) for institutions found elsewhere^{32 33 34} (e.g., higher enrolment and retention in courses using OER), thereby making a strong argument for greater resourcing.

Dimensions that show significant room for improvement include student partnerships, policies, incentives, resources/funding, leadership structure, and curriculum integration. These relatively weak levels of institutional support reflect the lukewarm embrace of OEP within institutional visions and the implementation of such visions.

Finally, the dimension that showed the weakest support for OEP was research support. While this may come as a bit of a surprise, particularly given the capacity for research within the sector, scholarly research on OEP in B.C. has more often been advanced by faculty members seconded to, partnering with, or

³² Mayer, J. (2023). Open educational resources (OER) efficacy and experiences: A mixed methods study. Libraries and the Academy, 23(4), 773–798.

³³ Neu-Stephens, H. (2020). <u>Open education resources and enrollment intensity in one Southern California community college</u>. National American University.

Ross, H. M., Hendricks, C., & Mowat, V. (2018). <u>Open textbooks in an introductory sociology course in Canada: Student views and completion rates</u>. *Open Praxis*, 10(4), 393.

supported by organizations such as BCcampus, the Open Education Group, and the Global OER Graduate Network rather than through the support of their home institutions.³⁵ ³⁶ ³⁷ ³⁸ ³⁹ Nonetheless, given the tremendous value of local research on OEP and the need to ensure that OEP is maintained as an evidence-based set of practices, support for the scholarship of teaching and learning on OEP should be regarded as a potential priority area.

Looking at differences between types of institutions, it appears that B.C.'s universities have developed stronger institutional supports for OEP than colleges or institutes. Whereas universities show only slightly greater integration of OEP in the institutional vision in their median responses, they demonstrate a much stronger implementation of that vision. This includes stronger partnerships with students, the library, and the centre for teaching and learning, more supportive incentives and policies, more funding, better communications, and a more robust evaluation of OEP supports. Although B.C.'s colleges report being at a more advanced stage of change when it comes to OEP, they only report greater supports when it comes to four dimensions: external partnerships, internal partnerships with the office of the registrar and campus store, and research support. Finally, B.C.'s institutes⁴⁰ reported stronger supports for OEP on two dimensions: professional development and curriculum integration. Overall, the dimensions that showed the

greatest differences between types of institutions were resources/funding and incentives. In both cases universities reported supports that were at least two levels above the levels of support reported by colleges and institutes.

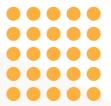
In order to analyze the data by region, responding institutions were first grouped into four major categories (Interior, Island, Lower Mainland, and Northern). Overall, institutions based in the Lower Mainland reported greater capacity to support OEP across most dimensions, including partnerships with students, the library, and the centre for teaching and learning, incentives, professional development, research support, communications, leadership structure, and curriculum integration. Interior institutions led with the integration of OEP into visions and external partnerships, as well as with policies, funding, awareness, and evaluation of OEP initiatives equal to those of institutions in the Lower Mainland. By contrast, Northern institutions reported the weakest (or joint weakest) capacity to support OEP across nine dimensions, followed by Island institutions (seven dimensions) and Interior institutions (four dimensions). Curiously, despite the relatively greater capacity of Lower Mainland institutions, this group reported their stage of implementation of vision for OEP as slightly lower than all other groups, perhaps underscoring the relationship between greater capacity and greater ambition.

- 35 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 Journal, 3(2), 1–29.
- 36 Barker, J., Jeffery, K., Jhangiani, R. S., & Veletsianos, G. (2018). <u>Eight Patterns of Open Textbook Adoption in British Columbia</u>. *The International Review of Research in Open and Distributed Learning, 19*(3).
- Hendricks, C., Reinsberg, S. A., & Rieger, G. W. (2017). <u>The Adoption of an Open Textbook in a Large Physics Course: An Analysis of Cost, Outcomes, Use, and Perceptions.</u> *The International Review of Research in Open and Distributed Learning, 18*(4).
- 38 Jhangiani, R. S., Dastur, F. N., Le Grand, R., & Penner, K. (2018). <u>As Good or Better than Commercial Textbooks: Students' Perceptions and Outcomes from Using Open Digital and Open Print Textbooks.</u> *The Canadian Journal for the Scholarship of Teaching and Learning, 9*(1).
- Paskevicius, M. & Irvine, V. (2019). Open Education and Learning Design: Open Pedagogy in Praxis. *Journal of Interactive Media in Education, 2019*(1), 10.
- 40 Given that only two B.C. institutes responded to this survey, trends concerning this category of post-secondary institutions should be interpreted with caution.

Next Steps

B.C.'s reputation as a global leader in open education has been earned primarily through the system-wide efforts of BCcampus, in addition to the initiative of individual institutions, educators, and leaders, many of whom have been recognized internationally for their pioneering work. However, uptake of OEP and the provision of institutional support has been unevenly distributed across the sector. In this context, the publication of this report and multi-dimensional assessment of OEP capacity provides valuable benchmarking for B.C.'s post-secondary institutions. In addition to this report, institutions that participated in this study will also receive a customized appendix detailing their capacity to support OEP, along with recommendations tailored to their context. Given the serious fiscal challenges facing the sector, this guidance will help ensure that B.C.'s public post-secondary institutions can strategically invest resources in supports for OEP that advance key priorities (e.g., student retention) while also garnering a strong return on that investment.

The recommendations that follow identify a set of 10 practical steps that individual institutions may consider implementing to enhance their capacity to support OEP, which in turn advances progress towards key strategic goals related to equitable access, student success, pedagogical innovation, and budget sustainability.



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 so 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 provincial, national, and international organizations, communities, and networks including BCcampus, BCOEL, and the B.C. Open Education Community (BCOEC). 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.
- 5. Staff: If possible, invest in the creation of one or more dedicated positions (e.g., OER librarian) or 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 by exploring training and education provided by BCcampus, eCampus Ontario, SPARC, the Open Education Network, Creative Common, the Rebus Foundation, and many others.

- 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 also have high student enrolment. Consider starting by incentivizing educators to review relevant OER within their discipline and go on to creating an OER adoption grant program 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 cataloguing) 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, email lists, 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.
- 9. 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 BCcampus' Research Fellows Program, the Open Education Group's Open Education Research Fellows Program, and the mentorship and resources provided by the Global OER Graduate Network. Consider working towards developing an OER research fellowship program 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 self-assess your institution's capacity and maturity and share your results with the research team at ierl@brocku.ca





The following public post-secondary institutions in British Columbia were invited to participate in the survey.

British Columbia Institute of Technology

Camosun College

Capilano University

Coast Mountain College

College of New Caledonia

College of the Rockies

Douglas College

Emily Carr University of Art and Design

Justice Institute of British Columbia

Kwantlen Polytechnic University

Langara College

Nicola Valley Institute of Technology

North Island College

Northern Lights College

Okanagan College

Royal Roads University

Selkirk College

Simon Fraser University

Thompson Rivers University

University of British Columbia (Okanagan)

University of British Columbia (Vancouver)

University of Northern British Columbia

University of the Fraser Valley

University of Victoria

Vancouver Community College

Vancouver Island University

Appendix B: Regional Groupings



Interior

College of the Rockies

Nicola Valley Institute of Technology

Okanagan College

Selkirk College

Thompson Rivers University

University of British Columbia (Okanagan)

Island

Camosun College

North Island College

Royal Roads University

University of Victoria

Vancouver Island University

Lower Mainland

British Columbia Institute of Technology

Capilano University

Douglas College

Emily Carr University of Art and Design

Justice Institute of British Columbia

Kwantlen Polytechnic University

Langara College

Simon Fraser University

University of British Columbia (Vancouver)

University of the Fraser Valley

Vancouver Community College

North

Coast Mountain College

College of New Caledonia

Northern Lights College

University of Northern British Columbia

