

# Using Open Educational Practices to Support Institutional Strategic Excellence in Teaching, Learning & Scholarship

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**Abstract:** This session explores the integration of Open Educational Practices (OEP) into an institutional strategy to develop distinctive excellence in teaching, learning and scholarship. The institution in the case study is a public polytechnic university serving a metropolitan area in Canada. If emerging Open Educational Practices are to flourish at our university, support for OEP must integrate with and contribute to our broader efforts to clarify and enhance our strategic position. All of our institutions will need to adapt OEP to fit our contexts, goals and strategies, and we look forward to engaging with conference participants in discussions about common and distinctive elements emerging in our differing contexts.

We will explore three example directions where emerging Open Educational Practices have the potential to align with, contribute to, and benefit from our institutional strategy for distinctive excellence in teaching, learning and scholarship:

- Integrating and mobilizing different aspects of knowledge to improve teaching practice;
- Opening up that process of improving practice as a model for our students' engagement with knowledge as professionals;
- Developing an institutional culture in which co-operative innovation is a signature characteristic which fosters student capabilities and expectations for innovation networks.

**Keywords:** Open Educational Practices, Teaching and Learning Strategy

## 1. Introduction

The “Open” nature of Open Education has expanded over time, in meaning and in importance. The first open institutions focused on Open Educational Access, breaking down barriers to extend opportunity to students who had been limited by traditional institutions. Open Educational Resources (OER) became a complementary strand of open education, offering the promise of reduced costs for students, reduced time required to develop and revise course offerings, and improved quality of teaching and learning leading to student success.

More recently, the notion of Open Educational Practices has been developed to frame “the next phase in OER development, which will see a shift from a focus on resources to a focus on open educational practices being a combination of open resources use and open learning architectures to transform learning” [Camilleri & Ehlers 2011]. This larger emphasis is concerned with “how

learning and teaching practices need to accommodate more open approaches to knowledge sharing” [McGill et al 2012]. The scope of Open Educational Practices continues to evolve, including concepts such as open pedagogies to document the rationale behind designs for learning, open exchange of teaching expertise, open scholarship to extend our knowledge of teaching and learning and open technologies to facilitate collaboration around open education [Beetham et al 2012].

In our institutional context as a regional polytechnic university, the first two elements of Open Education above are means to fulfill our regional mandate. Opening up new access opportunities for students and leveraging open educational resources for high quality teaching and learning support our institutional mission to serve the educational needs of our region, but will be difficult to leverage on their own as a source of reputational capital for excellence in teaching and learning. On the other hand, we do see potential for emerging Open Educational Practices to make a more strategic contribution as a source of distinctive excellence in teaching and learning and as a direction for aligning our plans for open education and our other academic endeavours.

In this paper we report on our initial investigations of potential strategic institutional benefits from Open Educational Practices. This account begins with an outline of our university’s context and role within our public higher education system. We then summarize our academic strategy and open educational plans, and follow that with a description of three specific directions where emerging Open Educational Practices have the potential to align with, contribute to, and benefit from an institutional strategy for distinctive excellence in teaching and learning:

- Enabling faculty to integrate and mobilize different aspects of knowledge to improve teaching practice;
- Opening up that process of improving teaching and learning as a model for our students’ engagement with knowledge;
- Developing an institutional culture in which co-operative innovation is a signature characteristic, and where student immersion in the institutional culture fosters their own capabilities and expectations for open innovation networks.

Each of these directions to strengthen our university’s strategic position through Open Educational Practices are very much works-in-progress. We know we must be selective in planning how we will invest in support for teaching, learning and scholarship. If emerging Open Educational Practices are to flourish at our university, support for OEP must integrate with and contribute to our broader efforts to clarify and enhance our strategic position.

## **2. Institutional Context**

Kwantlen Polytechnic University evolved from a university college context, and continues to offer multiple pathways leading to university credentials including certificate, diploma, and degree programs in the traditional liberal arts and science disciplines, in trades and technology fields, and in career and professional areas. As the province's only polytechnic university, we are committed to developing high quality capabilities for our graduates' professional and trades/technology careers (as a polytechnic institution), and also for their roles as community members and global citizens (as a university). As a public institution, we have always been committed to serving the diverse needs of our region (the southern part of the greater Vancouver area of British Columbia). Finally, our location on Canada's west coast gives us a particular opportunity and responsibility to prepare graduates with global perspectives and competencies, and to offer a supportive learning environment to international students.

KPU's Academic Plan 2014-2018 [KPU 2014] proposes a strategy which reflects and invigorates our provincial mandate as a special purpose teaching-intensive university. In addition to Open Studies, the Plan targets the following high priority advances in our teaching and learning environment:

- Enhance support for our faculty and other educators in mobilizing the emergent knowledge base for teaching and learning in their subject areas, in connecting to their larger professional communities, and in developing, adapting and evaluating new pedagogies;
- Increase experiential learning opportunities and strengthen the definition and assessment of institution-wide graduate attributes;
- Integrate curricular and co-curricular activities to ensure student success and well-being.

The Open Studies Plan includes components for an ongoing commitment to participate internationally in Open Educational Resources University (OERu), provincially in British Columbia initiatives in Open Textbooks, and regionally in providing open access to increase post-secondary attainment. The Open Studies Plan includes the following elements:

- Establish an annual Institutional Action Plan to define our contribution to the OERu strategy, as outlined by the OERu Council of CEOs in November 2014 [OERu 2014]
- Within the 2015 plan, identify five courses to be developed for contribution to OERu as well as for an OERu pathway to Prior Learning Assessment and Recognition at KPU.
  - Develop the courses using an agile open design process, using a collaborative “course sprint” model involving instructors, library staff, technical staff and media staff
  - Select OER textbook resources from the BCcampus SOL\*R digital library [Porter 2013] or other open digital collections as the basis for the development process
  - Use the development process to model open educational practices with faculty and staff.
- Design, pilot and launch a “Textbook Zero” approach to program development as a key strategy for the launch of KPU Open Studies. (A Textbook Zero approach [Bliss 2014] uses customizable open resources for all courses in a first or second year program.) We will also

actively draw upon the resources of the BC Open Textbook Program [BCcampus 2014]

### 3. Emerging Principles for our Strategy of Distinctive Excellence in Teaching, Learning and Scholarship

A strategy for distinctive excellence in teaching and learning has a number of potential benefits for our mission, our students and our region. As a relatively new university, we must compete for attention and resources as we become one of the key assets within our public system of higher education (and our graduates must compete with those from older universities for the best career opportunities). Our close ties with regional companies and organizations support our teaching mission by providing extensive opportunities for experiential learning. For our region, achieving a larger measure of recognition for our exemplary teaching can increase the benefits of our presence, including serving as a model for other regional organizations to aspire to excellence [Carey 2014] and bringing in new talent through students from elsewhere who as graduates decide to live in the region [Austin 2012].

Two principles are emerging as guiding concepts in the development of our strategy for a distinctive excellence in teaching and learning:

➤ ***How we know is a key part of what we know:*** As a polytechnic university, we value, develop, integrate and apply a full range of knowledge and ways of knowing – about our subject areas and about ourselves. Accordingly, in our learning, teaching and scholarship we take care to integrate a full range of knowledge practices as outlined above: the craft and skills of individual teachers, the professional knowledge of our broader teaching communities, and evidence from scholarly research and our own data analytics.

KPU is in the process of revitalizing our Institute for Innovation and Scholarship in Teaching and Learning (INSTL) through campus-wide consultations aimed at identifying precise needs, current challenges and sector-wide advances that may inform and enhance our teaching mandate. INSTL’s mandate is to promote exemplary teaching practices and connect our faculty and students to the dynamic global arena of teaching and learning. INSTL’s varied activities will support our academic goal to

*...recognize, nurture and promote exemplary teaching with the following range of knowledge practices:*



[Kwantlen 2014]

We know this will be a challenge for learning and development that we must address in enacting our Academic Plan. As a consequence, in our consideration of Open Educational Practices we will be seeking ways to systematically support our teachers in developing their own craft and skills for teaching, in learning about the professional knowledge base for teaching in their subject areas and in creative inquiry and disciplined innovation. The result must be a way of knowing, doing and being that reflects their individual identity as teachers and at the same time is embedded in and committed to our larger professional communities of teaching knowledge, practice and scholarship [Kreber 2010].

➤ ***How we teach is a key part of what we teach:*** As a teaching-focused institution, rich interactions amongst faculty and students are one of our signature characteristics. We want to leverage this strength through the insight we have quoted here from Parker Palmer’s *The Courage to Teach* [Palmer 2010]. For us, “how we teach is a key part of what we teach” goes beyond the original intent that our engagements with students model the capabilities and commitments we want them to develop (e.g, that we must demonstrate in class the respect for diversity and cultural differences that we want to see in our graduates). Our polytechnic university conception of knowledge practices within our teaching activity therefore goes beyond supporting students interactions with subject matter knowledge, to also include serving as exemplars for our students’ own engagements with knowledge in their professional careers (and also in their other roles as community members and global citizens).

Accordingly, in our consideration of Open Educational Practices we want to include in “how we teach” ways to make transparent how our faculty members (and other educators) engage with knowledge and knowledge communities in their instructional design activities to advance teaching and learning. In this way, ***“how we learn (as teachers) will become a key part of what we teach...and what students learn”***.

#### **4. Connecting with emerging developments in Open Educational Practices to support these principles**

Our involvement with Open Educational Practices is a means to support our university’s educational mission, not an end in itself. However, we know that we will be able to provide more support for Open Educational Practices when those practices and principles align with and support the principles and directions for our institutional strategies as outlined in the previous section [Carey & Hanley 2008].

***How we know is a key part of what we know:*** as one example of the links between our OEP commitment and our strategy for teaching and learning, we are exploring how we can engage our faculty in applying multiple kinds of knowledge in creation, adaptation and use of Open Educational Resources – and how the competencies and dispositions developed in our OER work can be leveraged in support of broader change in teaching and learning. These online

interactions around open, reusable resources form a basis for new open knowledge practices [Littlejohn et al 2014]. The infrastructure to enable such interactions, across our campuses and with wider discipline communities for professional teaching, is continuing to evolve.

For example, a *course framework* [Wiley et al 2014] for teaching with online learning consists of a set of shared online learning activities and resources for learning in a topic area, along with module and course designs using and adapting the shared resources for different contexts. We are exploring how our faculty can create deeper knowledge integration to contribute and enrich the rationale presented for particular designs and adaptations, as they create and adapt OER materials.

Another emerging infrastructure development promises to go further: a *course ecosystem* is intended to contain the elements of an open course framework community while also addressing the larger issues of changes in policy and practices, “including how best to provide incentives and rewards for faculty who contribute to a multi-institutional project, how to promote a culture of innovation, and how to structure investments to take full advantage of present and future technology” [APLU 2014].

We believe the evolution of these enhanced knowledge practices and knowledge sharing infrastructure associated with open course frameworks and ecosystems has potential as a major ‘generational change’, on the order of the shift from learning objects to open educational resources [Lane & McAndrew 2010], and we want to be sure our faculty contribute to this progress and leverage the emerging open knowledge communities and practices to improve student success.

***How we teach is a key part of what we teach:*** we expect that the use of open educational practices will in many cases lead to innovation in teaching methods and resultant changes to student learning activity: for students as for faculty, “working and learning in open networks is qualitatively different from conventional practice” [Littlejohn et al 2014]. For example, the work in the European COLEARN project to use open educational practices to develop students’ competencies for co-learning and co-inquiry [Okada et al 2014]. As a local example from our university community, a faculty member drew parallels for us between his professional practice as a music producer and the emerging practice of teaching at KPU – as an open and collaborative exercise that reflects nascent Open Educational Practices while enabling a collective (student-faculty) agency in learning, creativity, engagement and cooperative knowledge acquisition.

We can also see ways to use our OER involvement to engage students as partners in developing and adapting new learning resources and teaching practices [Carey et al 1999], an approach that is being incorporated elsewhere into institutional strategy for teaching and learning (e.g., the Students as Academic Partners program at Birmingham City University [CELT 2014]). The benefits students receive from this experience are typically focused on their experiences as learners in our programs, including deeper knowledge of subject area concepts in the OER, stronger sense of control or autonomy in their education, and an appreciation for the complexities of teaching and learning [Cook-Sather et al 2014; Hockings et al 2012].

In our context, we want to explore how students' engagement with OER can impact their knowledge practices beyond their time as students, as a model for the integration and mobilization of knowledge to improve practice in future professional careers. We are therefore exploring ways in which our faculty members' engagement in the creation, adaptation and application of OER can be shared with students to increase their understanding of the integration and mobilization of knowledge to improve work practices and performance.

We would also like our students to perceive these changes in their teaching and learning environment as innovations in work practices, and to reflect on their reactions to the changes as an experiential learning opportunity to prepare them for development and dissemination of innovative practices in their future career roles. We expect all of these emerging developments to help move us further as an institution toward distinctive outcomes of excellence in teaching and learning.

## **5. Impacts of engagement with Open Educational Practices on other aspects of institutional strategy**

We noted above that our approach to open educational practices at Kwantlen Polytechnic University reflects our particular mission and context. In this we are not unique: the journey to Open Educational Practices has been highly contextualized for all institutions taking this path [McGill et al 2013].

In our case, we expect the impacts of our OEP commitments to extend beyond knowledge practices in teaching and learning to include our relationships with other organizations and institutions. For example, we have not yet begun to explore how we can link our Open Educational Practices with the “applied research to serve the needs of our region” that is part of our institutional mandate. We have close ties with many local organizations through their professional staff who work with us as part-time faculty, and many of our full-time faculty members continue to engage regularly in professional practice.

Our draft institutional Research Plan addresses similar questions to those we have discussed here regarding the plans for teaching and learning – e.g., “what is distinctive about KPU’s contributions to solving complex human problems” [Kwantlen 2015] – and the answers emerging align with open educational practices as a signature institutional characteristic (e.g., “the overarching aim is to bring together the players, actions and mechanisms needed to... share ideas and discoveries”).

For us, this creates distinctive opportunities in the future to include open educational practices in our activities with regional organizations to develop their capability for integrating and mobilizing knowledge to improve practices, products and policies. We see an opportunity (and a need) to explore further how participation in Open Educational Practices can develop our institutional capability for engagement in this kind of collaboration with our regional partnerships for applied research, and serve as a model to help our students understand the benefits and challenges of such collaborations.

We will be looking for additional ways to apply the principles and lessons from Open Educational Practices in our research context, to replicate the benefits observed from OEP in our teaching and learning environment, including “greater external engagement...new partnerships, better relationships with existing agencies, new levels of understanding about collaborative working, improved dissemination, networking and learning opportunities” [McGill et al 2013]

Our engagement with Open Educational Practices can bring both practical lessons and an enduring cultural shift to support these research interactions. As an example of a practical lesson from such collaborations, a recent study of open educational partnerships (between higher education institutions and community organizations in Scotland) concluded that “the evidence emerging from what is now a sequence of diverse partnership developments is that these relationships enable each OER project to be more than simply robust development of content, but also a way of facilitating use by actors in the network” [Cannell & Macintyre 2014]. As an example of a longer-term cultural shift in these partnership relations, the same study noted the growing awareness of the importance of integrating “processes of identification and co-construction of content with context-specific understanding of social relationships and networks”.

Going forward, we can also see that our participation in emerging networks for open educational practices can be an exemplar for our students of Open Innovation Networks as an organizational structure for leveraging complementary strengths within and across organizations. Open Innovation Networks have demonstrated multiple benefits to participants:

- “pursuit of innovations across [organizational] boundaries through the sharing of ideas, knowledge, expertise, and opportunities” [Ketchen et al 2007]
- a focus on “something more ambitious than we could do with our internal resources” allowing us to “transcend the old boundaries and rethink roles and the way they are organized” [Jarvenpaa and Wernick 2012]
- “a collective...pooling of diverse and complementary resources to stimulate and accelerate innovation...[for] dynamic, collaborative and far-sighted research that leads to wide dissemination and exploitation” [Jarvenpaa and Wernick 2012]

## **7. Conclusions**

These examples of our initial work show the potential for a deeper integration of our engagements in Open Educational Practices as elements of our institutional strategy, with more to come. We have been particularly encouraged by recent reports of similar impacts noted at other institutions: “Evidence suggests that engaging with OER and open practices more broadly has led to a reconsideration of strategy, policy, processes and practice” and that many OEP projects were able to “align their work with key strategic agendas, such as widening participation, employability, or flexible curriculum approaches” [McGill et al 2013].

KPU's roots as a community college, created to increase access to the fastest growing region in British Columbia, continue with its new mandate: to be an "open" institution, accessible to all learners. With some exceptions, admission is still open to all high school graduates, with various pathways of qualifying studies. There are still, however, many un-met needs, especially among learners with time and other constraints, and it is clear that simply offering more of our past teaching models and infrastructure will not suffice for us to meet these diverse demands.

Instead, new and innovative approaches to curriculum, learning resources, outcomes-based assessment, the recognition of prior learning, and judicious use of technology will be needed, to enrich the learner experience and to meet the needs of traditional and non-traditional and adult learners (and in addition to improve the cost-effectiveness of our educational methods). Open Educational Practices have the potential to help us meet these needs, in ways that also address "the social, cultural and material barriers to participation in learning" [Cannell and MacIntyre 2014].

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## References

- APLU: Association of Public and Land-Grant Universities (2014). *Personalized Learning Consortium Overview*, <http://www.aplu.org/plc>.
- Andrade, A., A. Caine, R. Carneiro, G. Conole, U.D. Ehlers, C. Holmberg, A.-K. Kairamo, T. Koskinen, T. Kretschmer, N. Moe-Pryce, P. Munding, J. Nozes, R. Reinhardt, T. Richter, T. & G. Silva (2010). *Beyond OER—Shifting Focus to Open Educational Practices: OPAL Report 2011*. Due-Publico, Essen, Germany.
- Beetham, H., I. Falconer, L. McGill, L. and A. Littlejohn (2012). Open practices: briefing paper. JISC, 2012 <https://oersynth.pbworks.com/w/page/51668352/OpenPracticesBriefing>
- Brasher, A., J. Taylor, P. McAndrew and L. Moorthamer (2013). Learning lessons of innovation from MOOCs, OER and crowdsourcing environments: how can universities work in the open?. In *OER13: Creating a Virtuous Circle, 26-27 March 2013*. <http://www.medev.ac.uk/oe13/128/view/>
- Austin, J. (2012). Reanimating the vital center: Challenges and opportunities in the regional talent development pipeline. *New Directions for Community Colleges* 157. p. 17-27.
- BCcampus (2014). BCcampus Open Textbook Project. <http://bccampus.ca/open-textbook-project/>
- Bliss, T.J. (2015). Z as in Zero: Increasing College Access and Success through Zero-Textbook-Cost Degrees. Hewlett Foundation weblog post, Jan. 6 2015. [http://tiny.cc/textbook\\_zero](http://tiny.cc/textbook_zero)
- Camilleri, A. F., and U. D. Ehlers. "Mainstreaming Open Educational Practice." *Recommendations for Policy. OPAL Consortium* (2011). [http://efquel.org/wp-content/uploads/2012/03/Policy\\_Support\\_OEP.pdf](http://efquel.org/wp-content/uploads/2012/03/Policy_Support_OEP.pdf)
- Cannell, P. and R. Macintyre (2014). Towards Open Educational Practice. In: *EADTU Annual Conference: New Technologies and the future of Teaching and Learning*, 23-24th of October 2014, Krakow, Poland.
- Carey, T. (2014). Challenges for Regional Universities in “The Middle”. *Inside Higher Education* weblog post, Dec 16 2014. <http://tinyurl.com/T-LStrategy16-12-14>
- Carey, T. and G. Hanley (2008). Extending the impact of open educational resources through alignment with pedagogical content knowledge and institutional strategy. chapter 8 in T. Iiyoshi & V. Kumar (eds.) *Opening Up Education*, MIT Press 2008.
- Carey, T., K. Harrigan, A. Palmer and J. Swallow (1999). Scaling up a Learning Technology Strategy: Supporting Student/Faculty Teams in Learner-Centred Design, *Journal of the Association for Learning Technology*, 7(2), pp. 15-26.

- CELT: Centre for Enhancement of Learning and Teaching - Birmingham City University (2014). Students as Academic Partners, <http://www.bcu.ac.uk/student-info/why-study-at-bcu/learning-support/celt/student-partnerships>
- Cook-Sather, A., C. Bovill, and P. Felten (2014). *Engaging Students as Partners in Learning and Teaching - A Guide for Faculty*. John Wiley & Sons, 2014.
- Gil-Jaurena, I. (2013). "Openness in higher education." *Open Praxis* 5.1 pp. 3-5.
- Hockings, Christine, Paul Brett, and Mat Terentjevs (2012). "Making a difference—inclusive learning and teaching in higher education through open educational resources." *Distance Education* 33.2 (2012): 237-252.
- Jarvenpaa, S. L., and A. Wernick (2012). Open Innovation Networks: The Evolution of Bureaucratic Control. In Bøllingtoft, A. et al (eds.) *Collaborative Communities of Firms*. Springer New York. pp. 9-33.
- Ketchen, D. J., R.D. Ireland and C.C. Snow (2007). Strategic entrepreneurship, collaborative innovation, and wealth creation. *Strategic Entrepreneurship Journal*, 1(3-4), 371-385.
- Kreber, C. (2010). Academics' teacher identities, authenticity and pedagogy, *Studies in Higher Education*, 35:2, p. 172.
- Kwantlen Polytechnic University (2014). *KPU Academic Plan 2014-2018*.
- Kwantlen Polytechnic University (2015). *KPU Draft Research Plan 2014-2018*.
- Lane, A. (2011). Developing innovative systems for supportive open teaching practices in higher education. *Journal for the Systemic Innovation of Education*, 1(1), pp. 32–46.
- Lane, A. (2012). Collaborative Development of Open Educational Resources for Open and Distance Learning. Higher Education Academy.
- Lane, A., and P. McAndrew (2010). Are open educational resources systematic or systemic change agents for teaching practice?. *British Journal of Educational Technology*, 41(6), 952-962.
- Littlejohn, A., and C. Pegler (2014). Reusing Resources: Open for Learning. *Journal of Interactive Media in Education* 2014.1: Art-2.
- Macintyre, R. (2013). Open Educational Partnerships and Collective Learning. *Journal of Interactive Media in Education*, 2013(3), Art-20.
- McGill, L., I. Falconer, H. Beetham and A. Littlejohn (2012). *Open practice across sectors: briefing paper*. JISC, 2012.  
<https://oersynth.pbworks.com/w/page/49655750/OpenPracticeAcrossSectors>.

- McGill, L., I. Falconer, J.A. Dempster, A. Littlejohn and H. Beetham (2013). Journeys to Open Educational Practice: Executive Summary. JISC Report, May 2013.
- Muijs, D. and N. Rumyantseva, N. (2014). Coopetition in education: Collaborating in a competitive environment. *Journal of Educational Change*, 15(1), 1-18.
- Open Educational Resources University [2014]. Report of the Council of CEOs meeting in Sydney, Australia, November 2014.  
[http://wikieducator.org/OERu/OERu\\_14.11\\_Council\\_of\\_CEOs/Report](http://wikieducator.org/OERu/OERu_14.11_Council_of_CEOs/Report)
- Okada, A., C. Rabello and G. Ferreira (2014). Developing 21st century skills through co-learning with OER and social networks. In: *European Distance and E-Learning Network 2014 Research Workshop*, 27-28 October 2014, Oxford, UK, European Distance and E-Learning Network, pp. 121–130.
- Palmer, P. (2010). *The courage to teach: Exploring the inner landscape of a teacher's life*. John Wiley & Sons, 2010.
- Porter, D. A. (2013). *Exploring the practices of educators using open educational resources (OER) in the British Columbia higher education system* (Doctoral dissertation, Education: Faculty of Education).
- Wiley, D., T. J. Bliss, and M. McEwen (2014). Open Educational Resources: A Review of the Literature. In J. M. Spector et al (eds.) *Handbook of Research on Educational Communications and Technology* (pp. 781-789). Springer New York.