

Addressing the K-12 Open Educational Resources Awareness Niche: A Virtual Conference Response

Connie Blomgren, Serena Henderson

Athabasca University

Since the 2002 UNESCO forum, raising awareness of the benefits and challenges to Open Educational Resources (OER) in higher education have been integral to the broader Open Education (OE) movement. In the K-12 sector, however, an understanding of OER has been less advanced, although there are pockets of K-12 OER innovators throughout Canada and the United States. The 2015 U.S. Department of Education #GoOpen initiative, had over 20 American states move toward the use of K-12 OER, and within Canada, various provinces have begun investigating OER for both financial and pedagogical reasons. Because the use of K-12 OER inheres curricular decisions from the classroom teacher to all levels of governance, the move toward OER additionally involves a variety of sophisticated and complex digital and system-wide supports. This shift from the legacy educational system to the emerging practices where educators employ participatory technologies to curate, share out, and use student-generated curricular content requires awareness-building of these pedagogical and technological changes. Despite these impending shifts, the awareness, use, and the advocacy for K-12 OER as a nascent topic for professional learning, at present there are no dedicated specialist councils or professional organizations to support Canadian K-12 OER educators. To address this professional learning need, a virtual satellite conference was offered for in-service teachers as part of a network supported through the Scholarly Publishing and Academic Resources Coalition (SPARC), the Right to Research coalition, and the OpenCon platform. The OpenCon 2018 K-12 Athabasca virtual conference offered free professional learning regarding these changes in resource sourcing, creating, licensing, and sharing. Through meeting software, K-12 educators from Canada and beyond were able to learn about OER, Open Pedagogy, and the implications these changes bring to the teaching and learning processes. The virtual conference concluded with the Remix Panel that catalyzed topics from an OpenCon17 Berlin higher education discussion, remixing them for the K-12 context. Because this virtual conference has no precedent within Canada, the organizers of this inaugural event summarize its planning and execution, and explicate the significance of offering and archiving the presentations as part of the initiative to build a stronger awareness and understanding of K-12 OER current practices.

Depuis le forum de l'UNESCO en 2002, la sensibilisation quant aux avantages et aux défis liés aux Ressources éducatives libres (REL) dans le contexte des études supérieures fait partie intégrante du mouvement pour l'éducation ouverte. Dans le domaine M-12 par contre, les REL sont moins bien connues, bien qu'il y ait des îlots d'innovateurs en REL partout au Canada et aux États-Unis. L'initiative du département de l'éducation des États-Unis en 2015, #GoOpen, a poussé plus de 20 états américains à se tourner vers l'emploi des REL de la maternelle à la 12e

année. Au Canada, certaines provinces ont commencé à se pencher vers les REL pour des raisons financières et pédagogiques. Puisque l'emploi des REL dans un contexte M-12 implique des décisions relatives aux programmes scolaires, de l'enseignant en salle de classe jusqu'à tous les niveaux de gouvernance, la transition vers les REL implique également divers soutiens numériques sophistiqués et complexes à l'échelle du système. Cette transition vers des pratiques émergentes selon lesquelles les enseignants emploient des technologies participatives pour organiser, distribuer et utiliser du contenu pédagogique créé par les élèves exige une sensibilisation quant à ces changements pédagogiques et technologiques. Malgré ces changements imminents, la sensibilisation, l'utilisation et la promotion des REL de la maternelle à la 12e année comme sujet émergent en développement professionnel, il n'existe présentement aucun conseil spécialisé ni aucune organisation professionnelle pour appuyer les enseignants canadiens en M-12 relativement aux REL. Afin de répondre à ce besoin en formation professionnelle, une conférence satellite virtuelle a été offerte au personnel enseignant en service par un réseau appuyé par la Coalition de l'édition savante et des ressources académiques, la Right to Research coalition et la plateforme OpenCon. La conférence virtuelle OpenCon de Athabasca University en 2018 a offert un apprentissage professionnel gratuit sur ces changements touchant la recherche, la création, la concession de licences et le partage de ressources. Par le biais de logiciels de réunions virtuelles, du personnel enseignant M-12 du Canada et ailleurs ont pu apprendre sur les REL, la pédagogie ouverte et l'impact de ces changements sur les pratiques en enseignement et en apprentissage. La conférence virtuelle s'est terminée par le Remix Panel qui a fait la promotion de thèmes abordés lors d'une discussion portant sur les études supérieures à OpenCon17 Berlin tout en les adaptant au contexte M-12. Cette conférence virtuelle n'ayant aucun précédent au Canada, les organisateurs de cet événement inaugural en résumant la planification et la mise en œuvre et expliquent la signification d'offrir et d'archiver les présentations dans le cadre de l'initiative visant une meilleure sensibilisation et compréhension des pratiques actuelles impliquant les REL en M-12.

Frequently, organizers of professional learning offerings, such as a workshop or conference, will debrief and engage with informal discussions regarding what transpired during the offering. These discussions may become a list of what to repeat, discard, or change from an organizational lens. This paper, however, extends such reflection to a critical examination by two organizers of a virtual K-12 educator conference that examined the current understanding of Open Educational Resources (OER) and open pedagogy (OP; Hegarty, 2015). We provide our reflection-on-action (Schön, 1983) and our reflection-beyond-action (Edwards, 2017) to appraise the experience of organizing this online conference. Additionally, this examination further extends the open educational practices (OEP; Cronin, 2017) that were the focus of the conference, inclusive of submitting to an open-access journal.

OER and the Current Context

In 2002, at a UNESCO forum, the benefits and challenges of OER were initially discussed, coming to a consensus regarding what OER were to encompass. However, over time, the definition for OER has evolved into the following current understanding:

Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an

open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others. (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2019, pp. 3-4)

Within higher education, for a variety of complex reasons, including the conviction that unrestricted access for all is a social justice that OER represents (Knox, 2013; UNESCO, 2017), OER have been growing in their significance through local, national, and international awareness, use, and advocacy initiatives. Since their inception, OER have been an integral part of the broader Open Education (OE) movement (Cronin, 2017). Leaders in this movement, such as BCcampus and Kwantlen Polytechnic who offer free, generally peer reviewed, open source textbooks to students—assisting in the growing of zed creds movement—collaborate with OE leaders, such as Creative Commons and Scholarly Publishing and Academic Resources Coalition (SPARC), to evolve the view of education from simply a business for the dissemination of knowledge to one of co-creation and sharing (Henderson & Ostashewski, 2018; Kwantlen Polytechnic University, 2018).

Despite the uptake of OER, especially for the development of open-licensed textbooks for high-enrollment, introductory college and university courses (Straumsheim, 2015), the understanding of OER in the K-12 sector has been less vigorous. There are pockets of K-12 OER innovators throughout Canada, and even more so within the United States. The 2015 U.S. Department of Education #GoOpen initiative propelled 20 American states toward the use of OER for K-12 and has ambassador districts to mentor launch districts that support an initial foray into OER and its layers of complexities. Within Canada, various provinces have begun examining open resources for various reasons including fiduciary advantages and pedagogical responsiveness, but these investigations are sporadic, nascent, or non-existent, as revealed by searches of provincial government websites, online and offline discussions among members of professional learning networks (e.g., Twitter), and examinations of the professional development topics offered. Concomitant with the minimal practitioner awareness of OER stands the void in K-12 OER research, both nationally and internationally, as determined by a scoping of the literature (Blomgren & McPherson, 2018). The use of OER in K-12 requires curricular decisions, from the classroom teacher to all levels of governance, and due to the digitization of resources more broadly, the move toward OER involves an additional assortment of system-wide supports. This movement from the legacy educational system of limited and mostly print resources to the emerging practices where educators apply participatory technologies to create, curate, share, and use student-generated curricular content, necessitates awareness building. Technological changes in tandem with the social use of these technologies have nurtured OER and OEP. As one begets another, pedagogical changes are part of thoughtful OER use. Deeply understanding the possibilities of open licenses and practices energizes the concomitant shift to the digital commons and its resource abundance.

At Canadian practitioner conferences, OER how-to sessions are occasionally offered (e.g., Blended 2016; ULead 2019), placing this awareness an important focus for the overall development of OER. However, because of the interconnected decisions, license and attribution requirements, and the iterative cycle of Wiley's (2014) 5Rs (a creator's right to retain a license, and to reuse, revise, remix and redistribute), using OER is more than an individual effort and requires a collective effort to build and maintain critical large-scale OER components, such as repositories. Additionally, to support K-12 educators in their understanding of the pedagogical implications of teaching and learning with OER, the authors sought a response to fill the void of this current professional need.

Because higher education has been more active in the development of OER (Blomgren, 2018), groups have been established, one being SPARC and their OpenCon conference, satellite activities, and community. The OpenCon conference occurs annually and brings together invited novice OER researchers and advocates to learn from those more established in the field. An innovative practice of OpenCon is the satellite offering, where themes from the annual conference are re-interpreted at a local level. For the *OpenCon 2018 K-12 Athabasca* virtual conference, the authors applied to be an OpenCon17 satellite host and designed a program reflective of the OpenCon 2017 themes.

To ensure integrity and the perspective of practitioners, representatives from the CANeLearn network and the Alberta Distance Learning Centre participated in the overall design of the online offering. Over a series of meetings, the committee selected a date, a digital platform, a list of presenters, and designed a culminating remix panel. The committee consulted K-12 calendars in both Alberta and British Columbia to ensure that the free offering occurred on a non-teaching workday in January, very near the end of the high school semester, to meet availability needs of K-12 educators. Since Athabasca University was involved in this conference, Adobe Connect was the conferencing software chosen for the virtual presentations. The committee reviewed possible presenters, all of whom had been involved in one manner or another with OER. Several were Americans who had been involved nationally or at the state level with the #GoOpen initiative. The emphasis for the presentations was to share experiences and insights regarding the pedagogical implications of OER and to move in appreciation of how participatory technologies were part of the shift to resource abundance and the practice of Open Pedagogy. The 30-minute presentations ran back-to-back and were recorded and archived on a WordPress site that also houses the *Blended and Online Learning and Teaching (BOLT)* multi-author blog and the *Multiply K-12 OER* videos and podcasts. The final presentation, the Berlin Remix panel, lasted for an hour, and had a different approach and focus from the preceding presentations. Well in advance of the conference, four panel speakers were provided a link to a YouTube recording from the Berlin OpenCon 2017 (November) conference. Although the OpenCon conferences have a higher education focus, aspects of one Berlin panel resounded with K-12 OER pedagogical concerns. In the spirit of the 5Rs and remix, the K-12 panelists addressed these two questions (identical to those answered earlier in Berlin): *Within an OER curricular resource, how can educators consider: Who is missing? Whose knowledge is reliable?*

Panelists were encouraged to answer these two questions by referring to the Berlin video and to provide insights regarding their observations of how educators are addressing these next steps of OER considerations. Examples were encouraged by participants, as was commentary regarding addressing how OER provides possibilities that are not supported within a closed or publisher-restricted resource model. The organizing committee's intention for the Remix Panel was to echo the OpenCon17 panel yet also rejig the discussion beyond the words of free and share that dominate OER presentations for both higher education and K-12. The Remix Panel helped online participants, and those who view the recordings, develop a deeper, more thoughtful understanding of the pedagogical implications of OER, participatory technologies, and open pedagogy. No solid answers emerged but a provocative discussion regarding the potentials and pitfalls of OER for K-12 ensued; with the nascent OER state, robust discussions play a role in furthering the understanding and awareness of the complexities embedded with OER and open educational practices.

Questioning the topic	What was the reason for our engagement with the satellite online offering? Why were we concerned?
Questioning the literature	What does the OER and OEP literature suggest? What did we choose to question?
Questioning the experience	What did we want to know? How did we locate resources and from whom?
Questioning the organizers	Where did our reflective process provide insights? How were we part of open educational practices?

Note. Adapted from "Reflection-on-action in qualitative research: A critical self-appraisal rubric for deconstructing research," by M. Stynes, T. Murphy, G. McNamara, and J. O'Hara, 2018, *Issues in Educational Research*, 28(2), p. 159. CC BY-ND. Retrieved from <http://www.iier.org.au/iier28/stynes.pdf>

Figure 1. Reflection-on-Action-Rubric

Reflecting Back Upon our Learning

The online conference evolved from a desire to host an OpenCon satellite event to one that included an archived set of recordings, which were available freely on the Web. A significant amount of time and energy was spent planning, organizing, and implementing this professional learning offering, but as with many such occasions, the debriefing process marked a celebratory mood of pulling together the event with a nod to things for future consideration. This paper, through the process of thinking and writing, provides a reflection framed by a reflection-on-action (Schön, 1983) rubric that has been applied by researchers looking back upon a research project (Stynes, Murphy, McNamara, & O'Hara, 2018). Their reflective process "reviewed the merits and shortcomings of the case in a self-reflective learning exercise and through a thematic deconstruction ... brought significant practical and ideological questions into a new light" (Stynes et al, 2018, p. 153). Rather than a research case, the authors of this paper have applied the "reflection-on-action rubric" (see: Appendix) to the conference event and have therefore adapted aspects of the rubric for our context, and in this manner, have applied the concept, albeit with some limitations, and remixed the rubric in the vein of the 5Rs. We have questioned the topic, the literature, the experience, and who we are as organizers (rather than as researchers) of open educational practices. Figure 1 summarizes what we questioned; this application supported a deeper understanding of what the satellite conference nurtured. Through this process, we have also moved to a form of reflection-beyond-action (Stynes et al, 2018).

As with many educational practices, the conceptualizing of self-reflection for advancing teacher professionalism has changed over time. Various threads tease back to Dewey (1910) and van Manen (1995), who also uncovers further connections through the concept of *pedagogical tact* to that of J.F. Herbart. In 1898, Herbart, a philosopher and noted contributor to both psychology and pedagogical theory, wrote the following:

by reflection, reasoning, inquiry ... the educator must prepare not his future action in individual cases so much as himself, his tone of mind, his head as well as his heart, for correctly receiving, apperceiving, feeling, and judging the phenomena awaiting him and the situation in which he may be placed. (as cited in Friesen, 2015, para 2)

Understanding the complexities of teaching through self-reflection has been further extended to the notion of *reflection-beyond-action* with its characteristics that “develops professional practice through time, looking: back into the past; inward at the present; forward into the future” (Edwards, 2017, p. 11). Weaving in this past, present, and future orientation, catalyzed through the rubric, we can explicate a critically informed examination of the satellite OpenCon K-12 offering.

Questioning the Topic

What was the reason for our engagement with the satellite online offering? Why were we concerned? The growth and use of OER has been steadily increasing in higher education. The benefits of OER to higher education include reduced student textbook costs, the ability of OER content to be easily updated to reflect current events, the ability for instructors to tailor their courses to fit their desired objectives, faculty contributions to their discipline (Blomgren, 2018), and student-generated content or revisions as part of open educational practices (Ehlers, 2011). At the K-12 level, several additional benefits have been identified (Blomgren, 2018). These benefits include collaborations and partnerships in making curricular components for community engagement, improved quality through crowd-sourced knowledge sharing, independent learning possibilities (Bliss, Tonks, & Patrick, 2013), the redistribution of public dollars from educational publishers to resources commonly released through Creative Commons licenses—opening resources to all with defined permissions such as non-commercial or share-alike—in addition to enhancing teacher professionalism (Kimmons, 2014). Due to the nature of teaching students from the early years to late teens, educators look to a differentiation of content as well as the ability to personalize curricular resources. OER offers such flexibility (Blomgren, 2018) while promoting teacher creativity; contextualization of content to local conditions, cultural contexts, and language adjustments; supports learner-generated content production and sharing through participatory technologies; and the advancement of collegial and professional networks (Blomgren, 2018). Yet despite these benefits, Canadian awareness and understanding of K-12 OER and OP are nascent and require support.

The concept of the OpenCon satellite allowed Athabasca University organizers the ability to tap into the broader momentum of a global educational movement. The organizers felt that if they did not act, the benefits of OER might not be felt for an underdetermined amount of time. The axiom *if not now, then when* guided our intentions to begin, not because it had been directed by government, policy, or by an educational authority, but because we needed to start somewhere. Higher education had cut a path that we could follow.

Questioning the Literature

What does the OER and OEP literature suggest? What did we choose to question?

The OER movement has been on the rise for over 15 years. Initiated in 2001 by the Massachusetts Institute of Technology (MIT), the use of OER was first introduced into the public domain through the releasing of 50 MIT courses. The MIT OpenCourseWare project (2017) forced the world to take notice of the various benefits that OER can provide the public. As a reaction to MIT’s success, UNESCO held the *Forum on the Impact of Open Courseware for Higher Education in Developing Countries* in 2002. At the forum, leaders in developing countries came together to discuss the initiative *Education for All*, which was intended to

remove barriers to everyone through the adoption of OER and OP in developing countries, and as a result, improve socioeconomic statuses by 2015.

The 2016 White Paper survey reported that over the next five years, OER would potentially triple in size (Cengage Learning, 2016). The reality of this prediction is being acknowledged in higher education institutions worldwide, which is evident in the ever-growing research and literature. Topics such as business sustainability (Lashley, Cummings-Sauls, Bennet, & Lindshield, 2017; Anderson, 2008), social justice and human rights (Biswas-Diener & Jhangiani, 2017; Wiley, 2017), and institutional policy (Henderson, 2016; Henderson, McGreal, & Vladmierski, 2018; Kursun, Cagiltay, & Can, 2014; William and Flora Hewlett Foundation, 2013), are markedly on the rise as hot topics in OER. However, during our review, we found that literature speaking to the K-12 teacher experience and practice was significantly lacking (Blomgren & McPherson, 2018). As OER and OP are topics most frequently associated with higher education, the transference to K-12 is not a simple switch. This level of education not only involves younger learners but also carries various complexities, such as district, provincial/state, or national policies that are specific to each teacher's professional context. Despite these differences, we felt this change from the legacy system of education was an area that required inquiry through a virtual conference and is a part of what we chose to question about K-12 OER and OP. The awareness of OER within K-12 has been developing in recent years; the 2013 *K-12 Horizon* report, for instance, identified a 2-3-year time to adoption for open content (Johnson et al., 2013). The report also recognized that OER for the American K-12 system was once again acknowledged as a mid-range 3-5-year trend that would propel various uses for educational technology within face-to-face, blended, and online classrooms (Johnson et al. 2013). Yet, by 2018, a deeper understanding of the complexities of OER was still nominal and gaining minimal attention in Canadian education.

A recent study (Gorman, 2017) found that teachers spend on average seven hours per week of non-instructional time locating free or subscription digital resources. Some resources, such as those at *Teachers Pay Teachers*, are authored by practitioners directly and not by the traditional publishing house authors. Additionally, digital subscription-based curation companies are developing, in part due to the size and scope of the K-12 market. Publishers such as McGraw-Hill, and companies such as Amazon's *Inspire*, a K-12 OER platform (Molnar, 2016), are now searching for and curating resources. This movement into the OER marketplace highlights that there is money to be made and marks the next changes brought forth in the age of digital resource abundance. Being busy professionals, teachers, who are known to pay for student supplies out of their own pocket, may view digital curation services as an attractive timesaving solution, with the possibility of this perspective also extending to schools and districts as well. Yet, these resources may not be editable or customizable, and may not necessarily be of high quality, as paying for a resource does not ensure quality.

The issue of quality is an important concern and the 2014 European Union report regarding OER quality provides guidance for all levels of educators.

the traditional lifecycle of a resource, particularly with respect to the processes of creation, editing, evaluation and use, is significantly disrupted. Whereas before these steps were traditionally distinct, consecutive and managed by various actors, the freedom granted by OER leads to a blurring of these boundaries. The involvement of many more actors in each step therefore means a federation of responsibility for each step, which in turn can lead to cross-over in the functions and timing of processes, as well as sub-cycles (such as several rounds of editing and evaluation).

From a quality perspective this *federated responsibility* means that quality procedures related to OER cannot be applied to or by the manager of each process. Instead, *they need to include the wide spectrum of stakeholders which are involved in an OER lifecycle* [emphasis added]. This leads to the introduction of federated quality tools such as peer assistance and social ranking systems. However, the involvement of teachers, learners and evaluators in processes of co-production, reuse and repurposing offers significant opportunities to open up the entire learning architecture within formal education systems. (Camilleri, Ehlers, & Pawlowski, 2014, p. 4)

The report recognized that both low and high quality OER exists and that to move to more consistent high-quality learning resources, collective efforts are necessary. Of the six European Union recommendations given, four of them percolated through the offering of the OpenCon satellite conference (i.e., fragmented locations of high quality OER; institutional support for OEP; approaches to track reuse and revising; enabling processes for peer-learning and review; Camilleri et al., 2014, pp. 41-42). Meeting these four recommendations requires a strong foundation of OER and OEP awareness and use.

To respond to quality concerns for K-12 educational resources, the United States has *EdReports*. This is a free, non-profit organization that assesses the quality of educational resources through a rigorous process that requires practitioners to apply Common Core criteria to vet and rate math and language arts instructional materials. In early 2018, a Grade 6-8 math resource, created as an OER through a team of educators, received a near perfect EdReport score (Education Dive, 2018). This high-quality resource is also free. The financial case for OER continues to evolve, but the Grade 6 math resource highlights that OER can mean high quality for public education and the broader common good.

Teaching with OER and using open pedagogy brings forth this cascade of complexities that did not exist in the resource scarce, non-digital, publisher-controlled legacy system. The word “resource” comes from a mental model of what has been but does not fully reflect current and potential interpretations of what resource could mean when participatory technologies and open pedagogy come to fruition. Collectively, the conference planners decided to advance these concerns and create an avenue for K-12 instructors to come together in order to identify and consider their OER barriers and successes. Such awareness may spur further investigations and encourage policy and sociocultural changes in order to support the OER movement for K-12. By providing this opportunity, the virtual conference offered a snapshot into the K-12 lived OER experience and how we might meet future needs for K-12 teachers.

Questioning the Experience

What did we want to know? How did we locate resources and from whom? The committee for this online offering had expertise in OER or was experienced educators and knew that K-12 educators seek solutions to the practical aspects of teaching. Additionally, teachers recognize the importance of pedagogical thoughtfulness—the deeper questioning and discussions that occur when there is time for such conversations. A non-teaching workday allows teachers flexibility from the rigid bell-structure that rules most of their professional lives, and having an opportunity to pause, slow down, and to think is perhaps a hallmark of an authentic professional offering. The conference organizers recognized that a blend of practical and pedagogical presentations would supply a differentiated professional development offering.

In combination with presenter biographies and presentation summaries included as part of the registration process for the free event, attendees could determine what they attended synchronously and what they might access later through the archived recordings. Practicality flavoured with exploration opportunities for pedagogical OER issues helped to shape which presenters were invited and the ordering of these presentations. More than what we as organizers wanted to know, what drove our organizing efforts was *what did we anticipate that K-12 educators would want to know about OER and OP?* Through our collective experiences of offering teacher professional learning and exposure to practitioners in the field, we sought to have different access points into OER awareness and use.

Because of the #GoOpen initiative, we also sought the assistance of American educators who are further down the K-12 OER path. Despite the differences in curriculum responsibilities among provinces, territories, states, and the federal government level in the USA, the points of commonality facilitated a unique exchange of comments that lives on whenever an archived presentation is viewed. Learning from others provides OER novices an opportunity to avoid mistakes and to see the potential for open educational practices.

Questioning the Organizers

Where did our reflective process provide insights? How were we part of open educational practices? Through informal conversations with other OER supporters, a frequent observation is how OER invokes aspects of social justice and a passion for the emancipatory aspects of education. Of course, education has long been used as an extension of power, a handmaid of tyranny, and cannot be washed clean because of the open movement. There are perceptive critiques of OER and the open movement (Crissinger, 2015, Watters, 2014). The links between an uncritical embracing of openness to a neoliberal interpretation of a university, and by extension to the K-12 educational system cannot be denied (Almeida, 2017, Crissinger, 2015).

This situation is a conundrum—as there are also the OP benefits of content creating and sharing—Wikipedia, flaws and all, highlights how open practices can reconfigure digital content and be revised by those who read and use the crowd-sourced online encyclopedia. Place a print encyclopedia to Wikipedia and the contrast, highlights the expansive and creative role facilitated by participatory technologies. This shift from resource scarcity and control of knowledge production (i.e., the print era and considered more closed) to our current times of resource abundance and dispersal of knowledge production (i.e., the digital era and considered more open), in both tools available and content produced, marks an unprecedented responsibility for the profession of teaching. Educational publishers and textbooks co-exist with the current immaturity of OER and OP, and this co-existence will continue as open practices grow; educational resources in the very near future will likely include the categories of closed, semi-open, or open. Our current period requires a deeper awareness and understanding of the OER complexities involved, and especially so because of the nature of K-12 education. Through the OpenCon satellite, we advanced this awareness and in reflecting upon this achievement, the organizers at the debrief meeting shared texts, emails, and conversations that positively reflected the reception of this offering. A common theme in this feedback was that the satellite was an unprecedented offering, there was so much to learn about OER and OP, and we were thanked for filling this niche as similar offerings did not seem to exist.

There were 68 registered participants in the online event with 11 international registrants

(i.e., USA, Ireland, Brazil, China, and Greece) who likely accessed the recordings due to time differences. Twenty-five participants were from Alberta and the remaining 32 were from elsewhere in Canada. People were located in urban and rural schools, government offices, and university libraries. Locales such as Maple Creek, Saskatchewan, and Vanderhoof, British Columbia reinforce how an online offering addresses access to professional learning and supports the commitment to growth. There were eight 25-minute presentations delivered through the Adobe Connect virtual meeting platform. The schedule included the following: 1. Understanding the Commons for K-12 (Creative Commons licensing); 2. GoOpen from the Ground Up (overview of the #GoOpen initiative); 3. Simple Curation: Using Online Tools to Collect, Organize, and Share OER; 4. Opening Up K-12 Education in Alberta; 5. The Multiply K-12 Media Project; 6. Sharing K-12 Resources Across Canada: Silos, Gardens or Open Range?; 7. Berlin Remix Panel; and 8. Building the K-12 Teacher Network: Next Steps.

As part of the registration process, participants could indicate areas of interest, allowing for more than one possible preference. The following list indicates the top five choices with the number of times the topic was selected:

1. Open Educational Resources (63)
2. Blended and Online Learning and Teaching (49)
3. Teacher Learning and Professional Development (42)
4. Online Communities and Collaborative Opportunities (31)
5. Copyright, Databases and Online Resources (29)

This list highlights that our participants' general interests and our conference design dovetailed. Although the conference organizing committee could have determined a more precise naming of our outcomes, such a list would have been confusing or overwhelming for those new to OER and our intention was to encourage further interest by whetting appetites and growing nascent interests.

Before the virtual offering, participants were encouraged to use Twitter and the hashtag #K12OC2018 to extend a sense of anticipation and curiosity prior to the day. The twitter activity was minimal in advance of the sessions, minimal during the offering, and had minor post-activity. We can only speculate as to why this pattern emerged, but it likely relates to the degree of educator experience and comfort in using Twitter as part of their professional learning network (PLN). Other hashtags, such as #oer, were integrated with our #K12OC2018. With the archive of presentations publicly available on the internet and with the active #oer hashtag, we are confident that the network of users continues, albeit the vibrancy and strength we cannot fully determine.

As part of planning the virtual conference, we discussed how to model open educational practices through the design, implementation, and post-conference reflections. In seeking a scholarly journal for publication of our reflection-on action and moving to reflection-beyond-action, the authors determined that an open access journal was an essential choice. However, we also decided to choose one that did not frequently publish in the area of OER and its concomitant practices as a further means to extend awareness of OER beyond its community of followers. Through Twitter and the BOLT blog, the authors will continue to share out what began through the virtual offering.

Although there are curriculum changes happening throughout Canada, the movement toward OER use has not yet been realized as part of these changes. The federated responsibility

of creating, reusing, revising, remixing, sharing, and peer reviewing of educational resources affects classroom teachers, librarians, and the professionals involved in the interconnected and complicated layers of policy, administration, management, and financing of K-12 education. The intention of this virtual conference was to further OER and OEP awareness and to move the discussions beyond a “how-to” create an OER or use Creative Commons to having educators begin the process of understanding their potential roles and contributions to this federated responsibility.

Conclusion

The cautionary words of Nora Almeida, although directed to a higher education audience, also applies to the emerging OER and OEP landscape within Canadian K-12 education. There are economic and political ties to curriculum and how it is delivered and what appears innocuous on the superficial level—a kindergarten primer or a high school textbook relate to broader social goals of culturally responsive, inclusive education. Almeida (2017) stated that

As a phenomenon and a quandary, openness has provoked conversations about inequities within higher education systems, particularly in regard to information access, social inclusion, and pedagogical practice. But whether or not open education can address these inequities, and to what effect, depends on what we mean by ‘open’ and specifically, whether openness reflexively acknowledges the fraught political, economic, and ethical dimensions of higher education and of resource production processes. (p. 3)

These political, economic, and ethical issues surfaced throughout the presentations, but most notably as part of the Berlin Remix panel. It is through the looking back and this explication that others may pause and reconsider the complexities at play, and potentially review the archived presentations to further their reconsiderations. In this reflection-on-action, the two authors have attempted to work through some of the wicked problems of openness—through the process of organizing the conference and in the writing of this paper. We have arrived at the reflection-beyond-action (Edwards, 2017), whereby we have looked to what happened and where we are currently. This paper’s literature review and citations incorporate the OER past, the description of the current state of Canadian K-12 OER acknowledges the present, and, the publishing of this article adds to current and future understandings that may lead to even further discussions of reflection-beyond-action. This extension anticipates

the type of learning that may be vital ... to move beyond the limited confines of mechanistic reflection in the current form of reflection-on-action [and that] ... the development of professional practice can be enhanced; it can aid reflection-in-action and reflection-beyond-action, and enable the sharing of expert clinical [educational] practice in a way that reflection-on-action alone cannot. (Edwards, 2017, p.10)

Momentarily filling a niche was an overriding goal for the *OpenCon 2018 K-12 Athabasca* online offering. The degree we were successful is difficult to determine; however, we do feel encouraged by the ongoing professional learning network that has been facilitated in part by this virtual conference. Change happens continuously within education and our hope was to encourage a thoughtfulness regarding the changes wrought by the move toward openness and teacher professional growth. Simply being present and visible as a champion is beneficial to the growth of a new practice; bringing people together as change agents to actively teach, share, connect, and co-create is even better.

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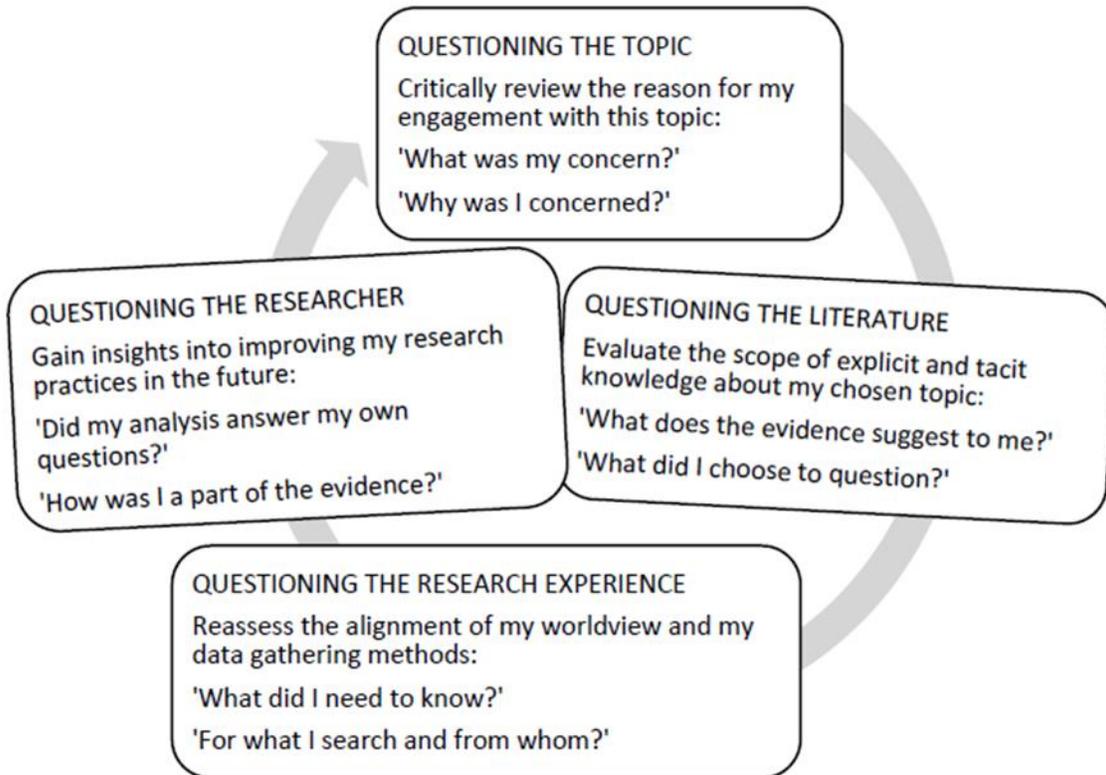
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Dr. Constance Blomgren is an Associate Professor in the Centre for Interdisciplinary Studies, Athabasca University. She creates, teaches, and researches about Open Educational Resources and Open Pedagogy. Her OER initiatives include the *Form and Function Callysto* project; the *Multiply K-12 OER* podcasts and videos; the *Annora Brown Art, Life, and Legacy* project; and *OER For A Better World* which are represented on the BOLT website. She sits as a Director for Open Education Global and is an Associate Editor for the *International Review of Research in Open and Distributed Learning*. Contact: connieb@athabascau.ca and @DocBlom.

Serena Henderson is the Managing Editor of the refereed, open access, e-journal *The International Review of Research in Open and Distributed Learning (IRRODL)* published with Athabasca University Press. She has a master’s degree in education, has held memberships and fellowships in open initiatives, holds a variety of certificates in copyright and open licensing, and has published articles on copyright, fair dealing, and OER. Her research interests include copyright law, fair dealing, open licensing, open access, open education, and open pedagogy.

Appendix: Reflection-on-Action Rubric



*Note. From "Reflection-on-Action in Qualitative Research: A Critical Self-Appraisal Rubric for Deconstructing Research," by M. Stynes, T. Murphy, G. McNamara, & J. O'Hara, 2018, *Issues in Educational Research*, 28(2), p. 159. CC BY-ND.