Community First: Open Practices and Indigenous Knowledge

Krista McCracken and Skylee-Storm Hogan

This paper seeks to examine how Open Educational Resources (OER) intersects with concepts of community ownership, Indigenous intellectual property rights, and cultural protocols.¹ Many Indigenous knowledge systems follow traditional, community based protocols for knowledge transfer and ownership that do not fit within Eurocentric forms of categorization or copyright. For example, Marie Battiste has argued that Indigenous knowledge:

- embodies a web of relationships within a specific ecological context;
- contains linguistic categories, rules, and relationships unique to each knowledge system;
- has localized content and meaning;
- has established customs with respect to acquiring and sharing of knowledge...and implies responsibilities for possessing various kinds of knowledge.²

Indigenous knowledge is fundamentally tied to Indigenous ways of being, knowing, and living. It is more than knowledge about a process or object. Knowledge in Indigenous community contexts is often tied to the personal histories of the families themselves. Government practices rooted in assimilation and colonialism have eroded and damaged Indigenous knowledge systems. Colonial systems broke down the ability for generations of Indigenous communities to

¹ This paper assumes a basic level of knowledge about Open Educational Resources. For more information about OER see the Scholarly Publishing and Academic Resources Coalition’s work on Open Education and OER: https://sparcopen.org/open-education/

communicate with each other. It is crucial that scholars take steps to avoid causing further harm and allow for the reassertion of Indigenous knowledge on its own terms.\textsuperscript{3} This means not attempting to place Indigenous knowledge within non-Indigenous epistemological frameworks.\textsuperscript{4}

Indigenous communities are actively working to challenge the notion that Indigenous traditional knowledge is in the public domain knowledge. Article 31(1) of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) declares that “Indigenous peoples have the right to maintain, control, project and develop their cultural heritage, traditional knowledge and traditional cultural expressions.” UNDRIP advocates for the rights of Indigenous peoples to protect and govern their own information. However, the Canadian Federation of Library Association’s Position Statement on Indigenous Knowledge in Canada’s Copyright Act clearly articulates that Indigenous knowledge is not protected under Canada’s Copyright Act. When traditional knowledge has been published through academic research or appropriation the “legal” copyright is held by the author of the published work, not the Indigenous peoples who it rightfully belongs to. Indigenous legal customs are not consulted or incorporated into Canadian legal systems. Decisions around who has legal ownership of Indigenous knowledge is often at odds with Indigenous ways of knowing and sharing.

A more nuanced approach to the inclusion of Indigenous voices and Indigenous knowledge needs to be taken when developing OER that include Indigenous knowledge. As this paper argues, creators of OER seeking to include Indigenous knowledge need to approach their work within a framework of reciprocity, care, and humility. They also need to understand that many systems of organization and knowledge production are directly linked to colonialism and can cause harm to Indigenous peoples.\textsuperscript{5} Creators need to make a conscious effort to avoid inflicting harm on Indigenous peoples and communities through non-consensual sharing or appropriation of knowledge. The following study is based on an analysis of 14 existing OER resources which incorporate Indigenous Ways of Knowing. Our analysis reveals that the majority of these texts were created through sustained relationship building between their creators and local Indigenous communities, and a significant minority focused on Indigenization. Following our review of these resources, we share best practices for OER resources on Indigenous knowledges, as well as avenues for future research.

**Research Approach and Rethinking Methodology**

From May to October 2019 we conducted an environmental scan of the existing OER landscape in Canada to look at resources which included Indigenous knowledge or were developed in partnership with Indigenous communities. This environmental scan involved searching and

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https://doi.org/10.1080/01639374.2015.1018396
browsing the B.C. Open Textbook Collection, the eCampus Ontario Open Library, Manitoba Open Textbook Initiative, and Merlot. We were specifically looking for OER created within the lands currently known as Canada that included Indigenous knowledge or were co-created with Indigenous communities. A resource simply having historical content about Indigenous peoples was not enough to be included. In practice, this established criteria meant that we excluded resources like the Canadian History: Pre-Confederation which includes Indigenous histories but does so without incorporating Indigenous knowledge, oral history, or ways of knowing. That said, it is important to remember that this environmental scan was focused on OER in the form of textbooks and more traditional publications but there are many other kinds of knowledge sharing out there. Indigenous communities are creating ways of sharing knowledge outside of academia and this work takes a multitude of forms, including everything from apps to blogs to second-life recordings. Further work must be done to assess the applications for this type of knowledge sharing in the academic environment.

We initially began our environmental scan by focusing on items that adhered to the 5Rs of OER. This means that works must be licensed so that users can “Retain, Reuse, Revise, Remix, and Redistribute” them. This criteria meant that copyrighted material or items CC licensed under BY-NC-ND or BY-ND were not included as part of the scan. But after speaking with Elders Shirley Horn (Missinaabe Cree First Nation) and Shirley Roach (Garden River First Nation) Krista realized that we needed to reframe the approach to the environmental scan and work to recenter Indigenous concepts of knowledge and access. We were basing our research on Western concepts of knowledge and knowledge sharing. The 5Rs of OER were created in a Western context and visiting with the Elders reminded Krista that Western frameworks do not work for sharing Indigenous concepts. As a result of learning and listening, we decided to broaden the OER search to content that was openly available but might not normally be classified as OER. In practice, this meant we expanded the survey scope to include material that was licensed under CC BY-NC-ND or BY-ND or had other community based restrictions that didn’t fall under common forms of CC licensing.

Consequently, we refocused the environmental scan to support an understanding of how Indigenous knowledge is transferred and cared for by communities. Indigenous knowledge taken out of context has the potential to be misused or misappropriated against communities. Given the very real concerns of appropriation, a no derivatives licence is sometimes intentionally used to limit how Indigenous knowledge can be shared. As such, our revised survey included materials licensed under these no-derivative terms.

Environmental Scan of Existing OER

The results from the environmental scan showed pockets of innovation, with a handful of institutions doing groundbreaking community driven work. Our analysis of these OER resources revealed several common patterns such as faculty collaboration and partnership with Indigenous knowledge holders, ongoing relationship building, a movement toward Indigenization

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of curriculum, community driven content development, and the need to continue to push for more Indigenous voices in post-secondary spaces. Below is a list of the OER located during the environmental scan.

Table 1: Indigenous OER

<table>
<thead>
<tr>
<th>Author/Editor</th>
<th>Title</th>
<th>Affiliated Project</th>
<th>Region</th>
<th>License⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloria Snivley and Wanosts’a7 Lorna Williams</td>
<td><em>Knowing Home: Braiding Indigenous Science with Western Science Book 1</em></td>
<td>Aboriginal Knowledge and Science Education Research Project</td>
<td>British Columbia</td>
<td>CC BY-NC-SA 4.0</td>
</tr>
<tr>
<td>Gloria Snivley and Wanosts’a7 Lorna Williams</td>
<td><em>Knowing Home: Braiding Indigenous Science with Western Science Book 2</em></td>
<td>Aboriginal Knowledge and Science Education Research Project</td>
<td>British Columbia</td>
<td>CC BY-NC-SA 4.0</td>
</tr>
<tr>
<td>Susan Manitowabi</td>
<td><em>Historical and Contemporary Realities: Movement Towards Reconciliation</em></td>
<td>n/a</td>
<td>Robinson-Huron Treaty region with an emphasis on Greater Sudbury, Ontario</td>
<td>CC BY-NC 4.0</td>
</tr>
<tr>
<td>Centennial College</td>
<td><em>Our Stories: First Peoples in Canada</em></td>
<td>n/a</td>
<td>Created in Ontario but has Canada-wide content</td>
<td>CC BY-NC-ND 4.0</td>
</tr>
<tr>
<td>Kory Wilson</td>
<td><em>Pulling Together: Foundations Guide</em></td>
<td>BC Campus Indigenization Project</td>
<td>British Columbia</td>
<td>CC BY-NC 4.0</td>
</tr>
<tr>
<td>Bruce Allan, Amy Perreault, John Chenoweth, Dianne Biin, Sharon</td>
<td><em>Pulling Together: A Guide for Teachers and Instructors</em></td>
<td>BC Campus Indigenization Project</td>
<td>British Columbia</td>
<td>CC BY-NC 4.0</td>
</tr>
</tbody>
</table>

⁷ For more information about creative commons licensing and to understand the different types of licenses listed in this chart see: [https://creativecommons.org/licenses/](https://creativecommons.org/licenses/).
<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Publisher</th>
<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobenshield, Todd Ormiston, Shirley Anne Hardman, Louise Lacerte, Lucas Wright, Justin Wilson</td>
<td>Pulling Together: A Guide for Leaders and Administrators</td>
<td>BC Campus Indigenization Project</td>
<td>CC BY-NC 4.0</td>
</tr>
<tr>
<td>Sybil Harrison, Janice Simcoe, Dawn Smith, Jennifer Stein</td>
<td>Pulling Together: A Guide for Curriculum Developers</td>
<td>BC Campus Indigenization Project</td>
<td>CC BY-NC 4.0</td>
</tr>
<tr>
<td>Asma-na-hi Antoine, Rachel Mason, Roberta Mason, Sophia Palahicky, Carmen Rodriguez de France</td>
<td>Pulling Together: A Guide for Front-Line Staff, Student Services, and Advisors</td>
<td>BC Campus Indigenization Project</td>
<td>CC BY-NC 4.0</td>
</tr>
<tr>
<td>Ian Cull, Robert L. A. Hancock, Stephanie McKeown, Michelle Pidgeon, Adrienne Vedan</td>
<td>Pulling Together: A Guide for Front-Line Staff, Student Services, and Advisors</td>
<td>BC Campus Indigenization Project</td>
<td>CC BY-NC 4.0</td>
</tr>
<tr>
<td>Tulo Centre of Indigenous Economics</td>
<td>Building a Competitive First Nation Investment Climate</td>
<td>n/a</td>
<td>British Columbia</td>
</tr>
<tr>
<td>Bettina Schneider</td>
<td>Financial Empowerment: Personal Finance for Indigenous and Non-Indigenous People</td>
<td>n/a</td>
<td>First Nations University of Canada driven, Canada wide content</td>
</tr>
<tr>
<td>Alan R. Pence and Allison Benner</td>
<td>Complexities, Capacities, Communities: Changing Development Narratives in Early Childhood</td>
<td>First Nations Partnerships Program</td>
<td>Canadian and international contexts</td>
</tr>
</tbody>
</table>
We located 14 OER textbooks created in Canada that incorporate Indigenous knowledge and were based in Indigenous community partnerships. Many of the OER listed represent sustained relationship building efforts and are the result of long term partnerships between Indigenous knowledge holders, academic institutions, and faculty members. These OER were often driven by one department, institution, or faculty member’s relationship with an Indigenous community. This section includes examples of how individual groups have approached OER from an Indigenous lens or worked to incorporate Indigenous knowledge into OER in new ways.

For example, *Historical and Contemporary Realities: Movement Towards Reconciliation* was developed with the Indigenous Social Work program, part of the School of Indigenous Relations at Laurentian University. The author, Susan Manitowabi, is explicit about her perspectives, the involvement of students, and the necessity for building relationships as part of creating this OER. In the OER’s epilogue Manitowabi discusses how cultural protocols such as offering tobacco as part of relationship building were integrated into the OER’s creation. She notes, “the person sharing the story needs to know the purpose for which the story will be used and how others will access the story and acknowledge where the story comes from.”

Likewise, Centennial College’s *Our Stories: First Peoples in Canada* was developed out of Centennial College’s work with Indigenous communities and ongoing relationship building connected to the “Indigenous Studies: First Peoples in Canada” stackable credential. The publication notes that, “[t]he stories that informed this etextbook were gifted to Centennial College by citizens of Nations and members of Indigenous communities. We recognize that these are not our stories, and we claim no ownership of them.”

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a no-derivatives license, acknowledging that the Indigenous knowledge shared in this etextbook belongs to communities and can only be shared with permission from that community. The Centennial College textbook is the only textbook in the environmental survey to include a no-derivatives license. But, it provides an important model for Indigenous communities who want to share information online, but want to ensure it has culturally appropriate protections. Overall, the textbooks found in the environment scan are examples which highlight the care and relationship building that is needed to include Indigenous knowledge in OERs in a respectful and reciprocal way.

Five of the 14 textbooks found were part of the Pulling Together project which is focused on the Indigenization of post-secondary institutions. With such a small sample size, having five OER as part of the Pulling Together series means that 36% percent of the OER were developed as part of the same project and were created out of the same Indigenous context. The Pulling Together series represents a model of what is possible through sustained investment and continued partnership with Indigenous scholars, communities, and stakeholders.

In addition to the list of OER textbooks, the Maskwacis Cultural College (MCC) use of OER is particularly noteworthy. Since 2016, MCC has been using OER in earth sciences and languages courses. In this case, when OER textbooks and open lecture notes were used in classes, these OER materials were supplemented by Elder presentations, lectures, discussions, and assignments with an Indigenous focus. This example showcases how OER can be used in an Indigenous context and how OER can work alongside traditional knowledge, without the publication of Indigenous knowledge in an OER textbook. It also points to additional research to be done in surveying the use of OER in classrooms alongside Indigenous teaching practices, an aspect which was not measured by this OER survey.

The model used by the Pulling Together series is one which might serve as a foundational example for other organizations looking to build OER in collaboration with Indigenous communities. However, it is significant to acknowledge that Indigenous communities are not uniform across this land and what works for one Indigenous organization or community might not work for another. We would encourage interested OER creators and adaptors to explore the OER listed above and learn from the models used in other organizations, while recognizing that these models will need to be modified to suit your circumstances.

Our survey of this small sample of existing OER which includes Indigenous Knowledge highlights the importance of working with community to build OER content, using a collaborative approach to developing OER materials, and fostering meaningful relationships with Indigenous knowledge keepers. The limited number of OER we found speak to the time needed to do this work and the ways in which Indigenization of academic content is in its infancy in Canada.

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11 Correspondence with MCC staff, October 2019.
Indigenous Knowledge in OER Best Practices

The following best practices were developed within our particular contexts. Krista McCracken is a settler who lives and works on Robinson-Huron Treaty Territory on the traditional lands of Garden River First Nation, Batchewana First Nation, and the Métis peoples. As part of their work at the Shingwauk Residential Schools Centre they also work closely with a number of members of the Missanabie Cree First Nation and Chapleau Cree First Nation. Skylee-Storm Hogan is of Kahnawake Mohawk and Irish setter descent, living and working on the unceded territory of the Algonquin, Anishinabek in Ottawa. While working with the Shingwauk Residential Schools Centre, they developed relationships and received teachings specific to Garden River First Nation, Missanabie Cree First Nation and the Three Fires Midewiwin Lodge.

The below practices reflect our geographic context and are based in relationships with First Nation and Métis communities in Northern Ontario. Your institutional and community context will be different and as Leanne Betasamosake Simpson has noted, “unless concepts have local meaning, it is difficult for them to have local resonance.”

We invite you to take what works for your community and leave what doesn’t. Adapt, remix, and localize these recommendations based on the needs of the Indigenous partners and communities you work with.

1. **Relationship building must come first.** Relationships need to be developed long before a project comes to fruition or a grant opportunity becomes available. Tending to relationships should be an ongoing reconciliation priority and is the foundation which all other work should be built.

2. **Nothing by us without us.** Any OER development that includes Indigenous knowledge should be done in collaboration with Indigenous community members and Indigenous stakeholders. This collaboration should extend from project inception to completion and be based on relationship building and partnership. Credit for the knowledges shared should be included in the material.

3. **Integrate OCAP Principles into OER development.** OCAP is a set of standards for how First Nations information should be collected, protected, used, and shared. The core principles are Ownership, Control, Access, and Possession. These principles articulate the inherent right of Indigenous peoples to manage their own information and should be integrated into any OER creation that included Indigenous knowledge.

4. **Not all Indigenous knowledge wants to be open.** Researchers and academics are not the ones who should decide which knowledge should be made open. Indigenous communities, knowledge holders, and Elders are the ones who should be making these decisions. Do not share information without consent and guidance. Remember to clearly inform these partners on how the information will appear.

5. **How information is shared matters.** Creative Commons licensing and the 5R’s of OER do not always meet the needs of Indigenous communities. How information is shared and how it can or cannot be reproduced needs to be understood within community

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contexts and made on a case-by-case basis. Creators of OER should explore traditional knowledge labels or other community driven means of sharing Indigenous knowledge.

Models For Indigenous Knowledge Online

This paper does not aim to be an authority on Indigenous knowledge or how Indigenous knowledge is shared online. Rather, it reflects on the current state of Indigenous knowledge online and provides recommendations on how practitioners of OER can collaborate with Indigenous communities.

Indigenous knowledge online can be viewed as a “new opportunity to support Indigenous resurgence that can be legitimate from Indigenous cultural perspectives if undertaken with care.”\(^{14}\) Indigenous knowledge can exist online - and even in the open - but cultural protocols for sharing information need to be respected.\(^{15}\) Best practices for sharing Indigenous knowledge include community involvement and community input into access decisions. Institutions need to shift access models when it comes to the intersection of open and Indigenous knowledge.\(^{16}\)

Drafted for the 2018 Creative Commons Global Summit, the *Traditional Knowledge and Creative Commons White Paper* examines creative commons licensing within the context of colonialism and control of Indigenous knowledge, effectively exploring the openness of Indigenous knowledge. This is a good starting point for anyone interested in learning more about licensing materials containing Indigenous knowledge. Similarly, the *Local Contexts* project provides an example of an initiative dedicated to supporting Indigenous communities in the management of intellectual property. The *Local Contexts* project created ‘Traditional Knowledge Labels’ as a tool for Indigenous communities to control access and use protocols to their information.\(^{17}\) These labels were based on Creative Commons licenses, while reframing “intellectual property as culturally determinant and dependent upon cultural consent to use of materials.”\(^{18}\) This project is one example of community based knowledge management initiatives built on a desire to support Indigenous decision making, Indigenous ownership, and Indigenous control of information and knowledge.

Currently, Traditional Knowledge Labels are being used within a number of cultural heritage, library, and information management settings. However, within the broad context of OER we

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18 Jennie Rose Halperin, “Is it possible to decolonize the Commons? An Interview with Jane Anderson of Local Contexts,” *Creative Commons Blog*, 30 January 2019. [https://creativecommons.org/2019/01/30/jane-anderson/](https://creativecommons.org/2019/01/30/jane-anderson/)
have seen very little discussion of how Traditional Knowledge Labels or a similar system, might be integrated into open educational resources. As of January 2020, none of the large OER repositories in Canada offer Traditional Knowledge Labels as an option during the licensing of OER material. The application of Traditional Knowledge Labels or a similar system within OER has the potential to transform how OER are shared and how Indigenous knowledge is engaged within the open community.

Conclusion

Indigenous knowledge is not built upon the same ways of knowing or epistemological systems as Western knowledge and its integration into OER needs to be considered within its own cultural and historical context. Indigenous communities are the stewards of their culture, knowledge, and identities as it relates to the past, present, and future. This needs to be respected in all approaches to OER that include Indigenous knowledge.

Creators of OER need to recognize the time, energy, and labour that goes into developing relationships with Indigenous communities. This is work that will take years. Creators also need to recognize the limited resources of many Indigenous communities. The development of OER might not be a priority for a community and researchers need to respect any decisions to decline to participate. Keeping those relationships intact is important even if the community is unable to provide you with what you need at that time.

The integration of Indigenous knowledge and OER provides opportunities for cross-cultural learning and the acceptance of Indigenous driven models of sharing information. As a field, practitioners of open need to work to better support the use of Indigenous frameworks and work to support Indigenous community driven projects.

Bibliography


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