# Indigenous and open education: A contradiction?

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Open education (OE) has a relatively short history compared to other educational constructs, but it is a history rich with aspirations about democratizing education, increasing student voice, reducing barriers to formal learning opportunities, and promoting justice for marginalized groups and individuals [(2002)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@ForumImpactOpen2002). A citation analysis published by Weller, Jordan, DeVries, and Rolfe, (2018) showed some of the earliest roots of OE literature to be in both the ‘open classroom’ movement in the 1970s and in the distance education literature beginning in the 1980s. The open classroom movement originated in the UK following the Plowden report [(Plowden, 1967)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@plowdenChildrenTheirPrimary1967), which argued for a student-centred model of education with open referring to the physical space of a classroom and the design of learning activities. Distance education, while originating with analog technologies such as the postal service and radio, television, or satellite broadcasts pivoted to digital technologies with the advent of networked computer technologies. Both origins of OE reflect the aspirations of their advocates to broaden access to formal education.

A challenge to modern open educators is reconciling the continuing emphasis on enacting social justice narratives with the attempt to do so in a digital landscape that is, at times, hostile to enacting social justice narratives. In the Canadian context, one of the most pressing needs for justice is embodied in the lives and communities of the Indigenous Peoples who have stewarded this land since time immemorial. OE, which is often, but not always, digital, seems at first to be at odds with the traditional principles of learning practiced by Indigenous Peoples. Two examples of this, according to Tessaro et al. [(2018)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@tessaroFiveIndigenizingOnline2018) are that Indigenous education is heavily dependent upon being situated in a specific community context at a specific time, conversely; open education is designed to transcend place and time and be accessible to anyone regardless of their location. Also, Indigenous education should be carried out in a context where teachers are very attuned to their students personalities, histories, needs, and goals, but open educators may never meet or even speak to any given student, so there is little chance that they will be able to understand the contexts of their students.

The following table outlines some of the major points of conflict between Indigenous education and online education as described by Tessaro, et al. [(2018)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@tessaroFiveIndigenizingOnline2018) (Table 1). Note that they refer to online education, not open education, but the characteristics of online education they describe are also characteristic of modern networked open education, which relies heavily on online technologies. It is not true that online education and open education are the same thing, but a thorough discussion of the differences is beyond the scope of this paper.

| Indigenous education | Online Education |
| --- | --- |
| situated in a specific community | accessible across multiple communities |
| highly contextual | very low context |
| experiential | technologically mediated |
| personal | impersonal |
| orally transmitted | text-based (implied in original) |

Table 1. Points of conflict between Indigenous and Open Education [(Tessaro, et al., 2018)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@tessaroFiveIndigenizingOnline2018)

With such apparent contradictions in approaches to learning environments, it seems that open educators, despite their commitment to social justice, may have a very difficult time respectfully engaging with Indigenous Peoples in digital environments. A closer look, however, may tell a different story. This paper will argue that the principles of Indigenous education are actually closely aligned with the principles of networked open education, but that this alignment may be undermined by the use of some commercial digitally networked tools.

## Open Education

Open education is typically understood as being a set of beliefs, values, practices, and resources that, when enacted, increase access to educational environments for the benefit of marginalized or underrepresented students. Educators who have surveyed the literature on the history of open education have found that early conceptions of open education were primarily focused on creating student-centred learning environments in K-12 (Cuban, 2004; Hendricks, 2017; Morgan, 2016) and, more specifically, three pairs of complementary values: “autonomy and interdependence; freedom and responsibility; democracy and participation” (Paquette, 2005). Morgan (2016) notes that these aims toward autonomy and freedom persist in the open education discourse today.

Modern open education can be more clearly understood by an examination through four lenses: permissions, pedagogy, participation, and platforms.

### Permissions.

The dominant discourse in OE literature beginning with the 2002 UNESCO Forum on the Impact of Open Courseware for Higher Education [(2002)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@ForumImpactOpen2002) until 2012 focussed on the benefits of openness that can be realized through the creation and adoption of open educational resources (OER) [(Lambert, 2018)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@lambertChangingOurDis2018). OER are typically described as being educational resources such as books, articles, videos, lessons, courses, or other artifacts that are licensed to allow end users (teachers and students) to participate in 5 activities related to the resource. Users are permitted and encouraged to revise, remix, reuse, retain, and redistribute the materials [(Wiley, ND)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@wileyDefiningOpenOpenND).

Lambert [(2018|)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@lambertChangingOurDis2018) describes this phase of the OE movement as being focussed on an aspirational narrative and that proponents were convinced a priori that ‘openness’ and ‘access’ are necessarily good. She challenges the assumption that simply providing free resources for all students will benefit all students.

### Pedagogy.

A second lens in the discourse could be called “pedagogy,” “open pedagogy,” or “open educational practices.” The writers of the Cape Town Open Education Declaration wrote:

open education is not limited to just open educational resources. It also draws upon open technologies that facilitate collaborative, flexible learning and the open sharing of teaching practices that empower educators to benefit from the best ideas of their colleagues. It may also grow to include new approaches to assessment, accreditation and collaborative learning. Understanding and embracing innovations like these is critical to the long term vision of this movement. [(2007, para. 4)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@CapeTownOpen)

This vision of pedagogical innovation is seen in Wiley and Hilton’s [(2018)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@wileyDefiningOEREnabledPedagogy2018) description of “OER-enabled pedagogy” as “the set of teaching and learning practices that are only possible or practical in the context of the 5R permissions which are characteristic of OER”. Similarly, Paskevicius described OEP as:

Teaching and learning practices where openness is enacted within all aspects of instructional practice; including the design of learning outcomes, the selection of teaching resources, and the planning of activities and assessment. OEP engage both faculty and students with the use and creation of OER, draw attention to the potential afforded by open licences, facilitate open peer-review, and support participatory student-directed projects. [(2017, p. 127)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@paskeviciusConceptualizingOpenEducational2017)

Other researchers describe OE as “resources, tools and practices to improve educational access, effectiveness, and equality worldwide” [(Cronin & MacLaren, 2018, p. 127)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@croninConceptualisingOEPReview2018.). It is notable that Cronin and MacLaren’s definition does not specifically mention the use of open licenses or OER while Paskevicius’ definition is specific about the use and creation of OER coupled with innovative pedagogies that are enabled by open licenses.

### Participation.

More recently, researchers have published papers critical of the aspirational narrative around open education being focussed on issues of social justice for marginalized groups. If marginalized groups (such as Indigenous people living in remote communities in northern Canada) have more difficulty accessing stable broadband internet, then the digital environment of most OE programming, regardless of whether it is pedagogically sound, will only benefit those who do have stable access to broadband internet and inequality will increase. This digital divide is suggested by the results of Rohs and Ganz’s investigation of massive open online courses (MOOCs) [(2015)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@rohsMOOCsClaimEducation2015). They found that participation in two different MOOCs was weighted towards people who already had obtained some level of higher education suggesting that MOOC participants were more likely to not be from a marginalized group.

Lambert’s recent article concludes with a definition of OE which centres social justice. She writes that there are three distinct components to social justice: “redistributive justice, recognitive justice [and] representational justice” [(Lambert, 2018, p. 227)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@lambertChangingOurDis2018). Redistributive justice is the act of making resources more readily available to those populations who may have less, recognitive justice engenders greater respect for marginalized voices, and representational justice involves giving voice to those who have been excluded from discourse. Lambert uses the example of an open textbook freely provided to a marginalized group (redistributive justice), but if that textbook does not include examples or illustrations drawn from the marginalized culture, then it lacks recognitive justice, and if it is written by and from the perspective of the dominant group, then it lacks representational justice. She offers the following definition of socially just OE:

Open Education is the development of free digitally enabled learning materials and experiences primarily by and for the benefit and empowerment of non-privileged learners who may be under-represented in education systems or marginalised in their global context. Success of social justice aligned programs can be measured not by any particular technical feature or format, but instead by the extent to which they enact redistributive justice, recognitive justice and/or representational justice. (p. 239)

However, what if this is not enough? What if OE, with its reliance on digital technology is actually causing greater injustice by excluding the voices of Indigenous people in Canada? What if OE is just another form of white colonialism and the extermination of Indigeneity? These questions can begin to be resolved by paying attention to Lambert’s deliberate phrase “primarily by and for … non-privileged learners” (p. 239, emphasis added).

### Platforms.

It is possible that some of Tessaro, et al’s. [(2018)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@tessaroFiveIndigenizingOnline2018) concerns about online education being incompatible with Indigenous education result from a conflation of the pedagogy of some out-dated online learning practices (text-based, low context), with the platforms used by some entities who claim to be leaders in online education (see [(Rohs & Ganz, 2015)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@rohsMOOCsClaimEducation2015)). The platform, or the technology upon which online education is built and is deployed, is not neutral. Some platforms, such as Google, Facebook, or Twitter exist as publicly traded, for profit companies whose business model is to extract as much data in the form of clicks, likes, shares, retweets, and favorites from their users as possible and then sell that data to advertisers and/or data-mining companies so that those companies can more accurately target users with advertisements. What they euphemistically call ‘engagement’ is fed into complicated algorithms that end up having a polarizing effect on societies and suppressing marginal voices. This extractive, algorithmically controlled economy of commercial networked technologies, despite the fact that it can be used for enacting social justice, is fundamentally at odds with the principles of Indigenous education. When marginal voices are suppressed (algorithmically or otherwise) both recognitive and representational justice are difficult or impossible.

Fortunately, there are other platforms which are more hospitable to both Indigenous and sound open education. Open source software, such as WordPress, Grav (content management), Big Blue Button, Blue Jeans (video conferencing), Mastodon and Mattermost (social networking) all have the characteristic that they can be customized by end users to suit their own needs for privacy, sharing, distributing, or archiving. They also enable rich audio-visual interactions and the ability for users to contextualize their online presence and thereby represent themselves accurately.

## Two-eyed seeing

If OE is to be “by and for” Indigenous Canadians, then OE practitioners must take the time to listen and to learn to see with two eyes. “Two-eyed seeing” is a term coined by Mi’kmaq Elder Albert Marshall to describe the integration of Indigenous and “western” ways of knowing [(Marshall, 2017)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@marshallTwoEyedSeeingElder2017). Two-eyed seeing is the English version of the Mi’kmaq word Etuaptmumk. Elder Marshall describes two-eyed seeing as:

learn[ing] to see from your one eye with the best or the strengths in the Indigenous knowledges and ways of knowing … and learn[ing] to see from your other eye with the best or the strengths in the mainstream (Western or Eurocentric) knowledges and ways of knowing … but most importantly, learn[ing] to see with both these eyes together, for the benefit of all (para. 2).

It is not taking bits and pieces from one or the other way of knowing, but weaving together knowledge from both systems and a journey of co-learning that occurs between Indigenous and non-Indigenous learners [(Bartlett, Marshall, & Marshall, 2012)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@bartlettTwoEyedSeeingOther2012).

## Truth and Reconciliation

The Truth and Reconciliation Commission of Canada has called open educators to action, generally in the sense that all Canadians are called to reconciliation, but also specifically in calls to close achievement gaps, improve educational attainment levels, develop culturally appropriate curricula and provide sufficient funding to “end the backlog of First Nations students seeking a post-secondary education” [(Truth and Reconciliation Commission of Canada, 2015, p. 2)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@TruthReconciliationCommission2015). There are a few ways to do this appropriately, and myriad ways to make the situation worse.

According to Antoine, Mason, Mason, Palahicky, and Rodriguez de France [(2018)](file:///Users/colin.madland/Documents/GitHub/phd/pages/02.two-eyed-open-education/@antoinePullingTogetherGuide2018), there are three related processes with respect to addressing past evils and current systemic oppression: indigenization, decolonization, and reconciliation. Indigenization is another word for two-eyed seeing. It is the weaving or braiding of Indigenous and western knowledge systems for the benefit of all students, teachers, and community members. Decolonization is the “process of deconstructing colonial ideologies of the superiority and privilege of Western thought and approaches” (p. 4). It involves correcting misconceptions and misrepresentations, and dismantling the status quo. Reconciliation is about addressing past wrongs, making amends, and improving relationships between Indigenous and non-Indigenous people. According to Chief Justice Murray Sinclair, Chair of the Truth and Reconciliation Commission of Canada, “Reconciliation is not an Aboriginal problem - it involves all of us” (p. 5).

## Indigenous Education

There is not one single way of approaching Indigenous education simply because there are hundreds of different First Nations in Canada alone. However, Antoine et al. (2018) identify four characteristics of Indigenous pedagogies that seem to be common to many Indigenous societies. Indigenous education is personal and holistic because it aims to develop the whole person, including emotional, cognitive, physical, and spiritual aspects. It also emphasizes experiential learning, or learning by doing and being mentored by older, more experienced members of the community. It is place-based because it is tied to a specific place and community in a specific geographical location and environment. Finally, it is intergenerational in that Indigenous Elders have a responsibility to pass down knowledge and wisdom to younger generations.

### Five R’s.

Tessaro et al. (2018) described an online course designed for Principals of First Nations schools. The course needed to be online in order to engage learners in remote areas where opportunities for professional development are scarce, but there was concern that there might be a conflict between the characteristics of online learning and the needs of Indigenous learners. To mitigate this risk, the course was designed to align with the five R’s of Indigenous education: respect, reciprocity, relevance, responsibility, and relationships.

#### Respect.

It is critical for Indigenous learning environments to be respectful of Indigenous values, specifically the lack of hierarchy in Indigenous cultures where every person is equal to every other person. This can clearly be a problem as modern Canadian universities are very hierarchical and bureaucratic, leading Indigenous learners feeling alienated.

#### Reciprocity.

For decades, Indigenous communities have been the objects of Western greed, research, and experimentation with researchers seeking only to answer an academic question. This extractive exploitation of Indigenous knowledge is deeply problematic. It is essential for both research and reconciliatory educational programs to be mutually beneficial with the community receiving tangible and durable benefits.

#### Relevance.

Indigenous learning environments must be relevant to the learners, meaning that the learning experiences must go beyond studying texts. There must be allowance for learners to engage with their own community needs and also to experience a sense of a learning community within the course.

#### Responsibility.

With the deeply interrelated nature of Indigenous communities, it is important for there to be a clear sense of responsibility for each individual to uphold the cultural norms of the community. This includes responsibilities within the course, but also responsibilities to the community and family.

#### Relationships.

Relationships are the foundation of Indigenous education. The other 4 R’s depend on the existence and maintenance of healthy relationships within the course and also external to the course.

## Conflicting Educational Worldviews?

It seems unlikely there are many OE practitioners who would have any problem with the goal of OE to bring about a more just Canadian society by promoting reconciliation, nor would many think that the five R’s of Indigenous education above are in any way foreign to how they wish to conduct their own courses. It seems much more likely, however, that Indigenous educators and learners might be reticent to trust settler society to honour and respect Indigenous ways of knowing and learning, even if it is in a well-intentioned effort to help.

This reticence would be rooted deeply in the psyche of Indigenous learners due to the generational impact of the horrors of the attempted cultural genocide perpetrated by church, government, and settler society. To make matters worse, the fact that OE is so closely tied to online technologies and the fact that many Indigenous communities in Canada are very remote means that the technological platform used must be in alignment with the principles of Indigenous education. Unfortunately, many modern networked technologies are built on principles that do not necessarily support the principles of Indigenous education. This misalignment between Indigenous education and some networked technologies should be addressed through the intentional use of open source technologies such as those described in a previous section. Further, Tessaro et al. learned that by attending to the five R’s of Indigenous education, they were able to create a learning environment for Indigenous school Principals that was surprisingly (to them) positive. They found that the challenges presented by the online environment actually turned out to be strengths.

## Conclusion

Returning to table 1, it would seem the superficially apparent conflicts between Indigenous education and online education could be more accurately understood as conflicts between Indigenous education and for-profit networked technologies designed to be extractive or between Indigenous education and out-dated didactic pedagogies employed widely in online and face-to-face education historically and presently. Indigenization, decolonization, and reconciliation are critically important and equally difficult. At the foundation of the work of open education should be Freire’s admonition in Pedagogy of the Oppressed:

True solidarity with the oppressed means fighting at their side to transform the objective reality which has made them these ‘beings for another’. The oppressor is solidary with the oppressed only when he stops regarding the oppressed as an abstract category and sees them as persons who have been unjustly dealt with, deprived of their voice, cheated in the sale of their labour – when he stops making pious, sentimental and individualistic gestures and risks an act of love, in its existentiality, in its praxis. To affirm that men and women are persons and as persons should be free, and yet do nothing tangible to make this affirmation a reality, is a farce. (2018, p. 54)