

Incorporating Indigenous Content Into K-12 Curriculum: Supports for Teachers in Provincial and Territorial Policy and Post-Secondary Education Spaces

Denise Webb & Angela Mashford-Pringle
University of Toronto

Abstract

In an era of learning truth and working towards reconciliation with Indigenous peoples, education institutions across Canada are in the midst of decolonizing their education spaces. Fundamental to this process are the Truth and Reconciliation Commission Calls to Action to educate settler teacher candidates to develop culturally appropriate curricula and incorporate Indigenous content into their teaching practices. Little research has reviewed institutional responses to these recommendations. To fill this gap, this study compiles recent efforts to inform Ministries of Education and post-secondary education institutions of effective and culturally safe methods to incorporate Indigenous content in curricula, based on current interventions and the lived experiences of teachers navigating the decolonization process. Two rapid reviews of grey and academic literature are completed. The findings shed light onto course-, professional workshop-, and policy-based interventions to support teachers in teaching Indigenous content. Interventions often prioritize cultural safety to underline teaching practices and focus on addressing settler biases, racism, and harmful stereotypes. Many Bachelor of Education programs offer mandatory courses on how to infuse Indigenous worldviews into curriculum, and emphasize building relationships, challenging positionalities, and establishing safe spaces to ask questions. Many teachers benefit from cultural safety training and resources, however, some continue to face challenges in confronting their roles and responsibilities as settlers within education spaces. As decolonizing education is an ongoing process, this research aims to provide key information to advance its progress. To that end, future research needs to investigate the long-term impacts of existing interventions on teaching practices and curriculum development.

Keywords: Indigenous education, education policy, teacher education, post-secondary education, cultural safety, Indigenous, Canada, decolonization of education

Introduction

Indigenous¹ cultural safety in Canada as a concept, action, and/or phrase is becoming increasingly popular within provincial and territorial government corners, as well as education institutions, as they begin to incorporate culturally safe content in both K-12 (kindergarten to high school) and postsecondary classrooms. Within these spaces cultural safety is considered:

The effective teaching of a person/family from another culture by a teacher who has undertaken a process of reflection on his/her own cultural identity and recognizes the impact of the

¹ Indigenous in the context of this paper refers to status and non-status First Nations, Métis, and Inuit collectively, residing in Canada.

teacher's culture on his/her own classroom practice... Unsafe cultural practice is any action that diminishes, demeans or disempowers the cultural identity and well-being of an individual or group. (Harrison et al., 2012, p. 324)

The release of the 2015 Truth and Reconciliation Commission of Canada (TRC) report prompted many Ministries of Education and academic institutions across Canada to emphasize cultural safety, as well as promote and support Indigenous voices in education systems (Keliipio et al., 2018; Korteweg & Fiddler, 2018; Marom, 2019). The TRC sheds light onto how K-12 classrooms and curricula are dominated with Eurocentric (western-based) ideologies, to the exclusion of Indigenous worldviews (TRC, 2015a). The report summarizes an investigation into lived experiences of Indian Residential School (IRS) survivors, aiming to establish a space for truth and public education on the traumatic, lethal, and intergenerational impacts caused by the IRS system (TRC, 2015a). The policies surrounding the IRS sought to systemically erase Indigenous cultures, traditions, and languages, attempting to provide a “solution” to the “Indian problem”. Its impacts transcend into today's society and have left a mark on every Indigenous family and child; a considerable intergenerational impact.² With greater public attention, promoting principles of cultural safety is becoming an ethical obligation, and in some cases a professional expectation, for government and educational institutions, so as to work towards reconciliation with Indigenous peoples. In education spaces, efforts towards reconciliation have led to plans for decolonization of K-12 classrooms and post-secondary institutions. Decolonization is the process of deconstructing and dismantling colonial ideologies to the effect of revitalizing Indigenous ways of knowing and doing. It involves addressing settler biases and disrupting solely Eurocentric approaches, deemed superior by colonizers (Antoine et al., 2018). As such, decolonization improves accessibility of education for all Indigenous, as well as non-Indigenous learners.

The TRC Calls to Action 10.3 and 62.2 provide direction for the decolonization process, recommending that schools, colleges, and universities “develop culturally appropriate curricula” and “provide the necessary funding to post-secondary institutions to educate teachers on how to integrate Indigenous knowledge and teaching methods into classrooms” (TRC, 2015, p. 2, 7). Many institutions have responded to these recommendations, through education policy, pre- and in-service teacher program development, and other broad initiatives within educational institutions such as cultural safety workshops or training for educators (Mashford-Pringle & Nardozi, 2013). These efforts may also be attributed to the Royal Commission on Aboriginal Peoples (RCAP) and recommendations for policy development.

Prior to the TRC, from 1991-1996, the federal government commissioned the RCAP to improve the relationship between the Canadian government, non-Indigenous, and Indigenous peoples. It led an investigation of the health and social issues that have an impact on Indigenous communities across Canada, and proposed solutions for the Canadian government and all of society to act on (Library and Archives Canada, 2016). The RCAP addressed education issues within and across Indigenous communities, explaining that despite recent improvement integrating Indigenous teachings into school curriculum “revisions often gloss over or avoid tackling the fundamental changes that are necessary to create curriculum that is rooted in an Indigenous understanding of the world, in subjects such as history, art, health, mathematics and sciences” (RCAP, 1996, p. 425). This conclusion led to the following recommendation:

Federal, provincial and territorial governments collaborate with Aboriginal governments, organizations and educators to develop or continue developing innovative curricula that reflect Aboriginal cultures and community realities, for delivery (a) at all grade levels of elementary and secondary schools; (b) in schools operating under Aboriginal control; and (c) in schools under provincial or territorial jurisdiction. (RCAP, 1996, p. 431)

Although, many provinces did not address the RCAP, assuming its recommendations fell under federal responsibilities (Doerr, 2015), and as a result, a number of MOE were more responsive to the recent TRC (Keliipio et al., 2018; Korteweg & Fiddler, 2018; Marom, 2019).

² For more information on historical and current intergenerational trauma among Indigenous peoples, please refer to: Aguiar, W., & Halseth, R. (2015). *Aboriginal peoples and historic trauma: The processes of intergenerational transmission*. National Collaborating Centre of Indigenous Health.

Researchers have explored the impacts of available post-TRC programming and policy development on the experiences and perspectives of pre- and in-service teachers, investigating their level of preparedness and highlighting necessary next steps to strengthen current efforts (Keliipio et al., 2018; Mashford-Pringle & Nardozi, 2013; Vetter et al., 2014). Little research, however, has compiled recent efforts in a way to help institutions learn from others and to design strategies to effectively and safely deliver Indigenous content in classrooms and institutions, based on promising practices, evidence-informed interventions, and the lived experiences of pre- and in-service teachers navigating the decolonization process. To fill this gap, we provide researchers, students, and decision and policy makers in education an overview of the essential information to inform program and policy development in a manner that supports, promotes, and decolonizes western dominated K-12 and pre-service education spaces. Through a rapid review methodology, this study provides a collection of provincial/territorial (P/T) Ministries of Education (MOE) and post-secondary institutions' Bachelor of Education policies and programs on supporting non-Indigenous (settler) teachers in incorporating and teaching Indigenous content in their classrooms; as well as summarizes their experiences and levels of preparedness. To this end, this research aims to answer the following questions.

1. What sorts of resources (in-service professional workshops, pre-service teacher education programs [B.Ed.], and institutional policies) are available to non-Indigenous (settler) teachers in elementary and secondary schools to prepare and to support them in teaching and incorporating Indigenous content?
2. What is known about the level of preparedness of settler teachers to teach Indigenous content?

The following sections describe the study's methods, followed by a discussion of the key findings and concluding remarks.

Methods

Search Strategy

The study was completed through two separate rapid reviews, an accelerated method to a systematic review with narrowly defined research questions (Stevens et al., 2018), and followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Checklist (PRISMA, 2009), as reporting guidelines specific to rapid reviews have yet to be developed (Stevens et al., 2018). We employed a rapid review due to timing limitations for a current research initiative. We required a look at the current landscape to understand what was being offered to teacher candidates regarding their knowledge of Indigenous cultural safety and how to use this in a classroom. To that end, the first review gathered policies and programs (a primarily grey literature search) implemented by P/T MOEs and post-secondary university institutions offering a Bachelor of Education degree program. The search was completed by one researcher and informed by MOE and post-secondary institutional websites, reviewing primarily publicly available policies and course curriculum resources. A complete list of the MOE and PSE institutions searched is provided in Appendix A. As this review was a grey literature search, exact proportions of literature and website pages reviewed is difficult to track and determine. To estimate, approximately over 60 and 80 grey literature resources from MOE and PSE institutions respectively were reviewed.

The second review collected academic peer-reviewed literature that describes pre- and in-service teachers' experiences in teaching and incorporating Indigenous content in K-12 classrooms, as well as their perspectives on how well they were prepared by their teacher education programs. The search strategy was informed by the advice and expertise of librarians in Indigenous and education studies at a Canadian university. Two researchers completed the second review and consulted academic databases such as the Education Resources Information Centre (ERIC); Canadian Business and Current Affairs Complete (CBCA Complete); Indigenous Studies Portal (iPortal); and Education Source. Databases were divided between the two reviewers, as each independently screened titles and abstracts of all collected pieces of scholarly work. Both reviewers then completed full-text screening of the literature. Articles were shared between the reviewers during full-text screening to discuss inclusion, if one reviewer was uncertain. No disagreements about whether or not to include any literature resulted from these discus-

sions. Data extraction was completed independently by both reviewers.

We began with the academic review and moved to the grey literature review as there was a gap in the literature that summarized education policies in Canada with regards to incorporating and teaching Indigenous content. Additionally, as little research has investigated the preparedness of pre- and in-service teachers as a result of pre-service programming, researchers determined the value in exploring all B.Ed. programs to gain a better sense of the types of available programs that exist. Thus, the two reviews are numbered according to relevant and foundational knowledge to help readers critically understand and examine the topic explored in each review.

Table 1. describes the inclusion criteria for each review, according to the PICO framework, which is an acronym used to guide systematic and other reviews in establishing inclusion criteria of literature sources, depending on the study's population, intervention, comparison, and outcome (PICO) concepts of interest (Thomas & Higgins, 2019). Each concept as it relates to this study is described in Table 1, thereby framing the inclusion criteria. Other aspects such as language and time restrictions are also considered.

Table 1
Inclusion Criteria

Population Concept	Review #1: Education Policy <ul style="list-style-type: none"> • Canadian provincial and territorial (P/T) governments, Ministries of Education • Post-secondary university institutions offering a Bachelor of Education (B.Ed.), excluding programs above or below the B.Ed. level (e.g., college level, master's, earned doctorates) Review #2: Teacher Experience <ul style="list-style-type: none"> • Teachers, educators • Grades K-12 • Canadian public schools
Intervention Concept	Review #1: Education Policy <ul style="list-style-type: none"> • P/T/University policies, legislation, and/or programs Review #2: Teacher Experience <ul style="list-style-type: none"> • Teacher programs, educational tools, strategies, techniques, resources (i.e., any form of supports to assist/prepare teachers to teach indigenous content)
Outcome Concept	Review #1: Education Policy <ul style="list-style-type: none"> • Incorporation of Indigenous content in curricula by pre- and in-service teachers is supported, promoted, or mandated by the P/T/University Review #2: Teacher Experience <ul style="list-style-type: none"> • Discussion on preparedness of teachers; program evaluations • Must be on educator's experience with teaching/incorporating Indigenous content
Language	Reviews #1 & 2 <ul style="list-style-type: none"> • English³
Time Frame	Reviews #1 & 2 <ul style="list-style-type: none"> • 1996 – present (April 2021)⁴

A total of 910 articles were found, 9 duplicates were removed, and 901 articles were moved to title and abstract screening. Of this, 100 articles met the inclusion criteria (see Table 1) and proceeded to full-

³ Literature is limited to the English language due to language limitations of the authors. This limitation may restrict the collection of available policies and resources from the Quebec and New Brunswick MOE. Further research is recommended to conduct a more accurate search on the Quebec and New Brunswick MOE.

⁴ Literature sources are limited to 1996-present in order to exclude information published prior to the 1996 Royal Commission of Aboriginal Peoples (RCAP). Indigenous leaders first formally recommended culturally appropriate curricula in RCAP policy recommendations (RCAP, 1996, p. 425, 431).

text screening. After which, 83 were excluded for the following reasons: 32 had incorrect population; six incorrect interventions; 27 incorrect outcome; 10 outside the study's time restrictions and dated prior to 1996; seven inaccessible; and one was not peer-reviewed. To this end, 17 articles met the inclusion criteria.

Charting the Data

The following information was charted for review #1: the province/territory, identification of an Indigenous branch of the MOE, specific policy(ies) on Indigenous content for teachers, available resources for teachers, any mentions of Indigenous content in the curriculum, last date of update if available, and useful links for further learning or resources. In terms of post-secondary institutions, each of the following was collected and charted: province/territory, university title, B.Ed. title, indication if Indigenous stream exists, program length, indication if the website lists Indigenous content, and the date of last available update. For the purpose of this study, Indigenous streams in PSE institutions refer to B.Ed. programs shaped around Indigenous content, worldviews, and teaching styles. Some may also aim to support specifically Indigenous pre-service teachers, non-Indigenous settlers, or both, with an interest to teach Indigenous students and/or content.

The following was charted for review #2: the author(s), article title, year of publication, key word(s), database found, a condensed summary, and the research question(s) that the article addresses (i.e., either resources available to teachers and/or the level of preparedness or experience of teachers). Collection of the final variable(s) is subjective in nature and reliant on the reviewer's interpretation of the articles' discussion, thereby contributing research biases to the results. To minimize bias, upon completion of data extraction one of the two reviewers screened independently the entirety of the included articles to ensure that each was appropriately charted, according to the research questions. Only two out of 17 literature sources included in this study were charted differently as a result of this process, as both were originally charted as addressing only one research question. However, upon an additional review, both were revealed to contain information relevant to each question and were charted accordingly.

The findings of the second review are summarized and grouped into thematic categories, depending on the content discussion and on common themes presented within the literature. The following section provides a synthesis of results from both reviews using a narrative approach to describe and summarize through discussion how the findings pertain to each of the research questions.

Results and Discussion

Review #1—Education Policy: Ministries of Education

What sorts of resources (policies, programs, etc.) are available to K-12 teachers to prepare and support them in teaching/incorporating Indigenous content?

As shown in Table 2, where policies exist according to the provincial/territorial Ministry of Education, we found different levels of resourcing provided to teachers, such as professional development programming, cultural safety training, and curricula development tools.

Table 2

Provincial/Territorial Ministries of Education Policies and Resources to Promote Incorporation of Indigenous Content in K-12 Curriculum

Province/ Territory	Policy on K-12 Teachers Teaching and Incorporating Indigenous Content	Resources to Support Teachers	Indigenous Content in K-12 Curriculum	Latest Update
British Columbia	✓	✓	✓	2020
Alberta	✓	✓	✓	2017
Saskatchewan	✓	✓	✓*	n/s**
Manitoba	None identified	✓	✓	2007
Ontario	✓	✓	✓	2019
Quebec	None identified	None identified	n/s	n/s
New Brunswick	None identified	None identified	✓	2020
Nova Scotia	✓	None identified	✓	2021
Prince Edward Island	None identified	None identified	✓	2019
Newfoundland and Labrador	None identified	None identified	✓	2018
Yukon	None identified	✓	✓	n/s
Northwest Territories	✓	✓	✓	2019
Nunavut	None identified	✓	✓	2020

*only focused on First Nations and Métis education, did not include Inuit based or focused education. Incorporated into all subject material besides core French.

**not specified

*** Although this study did not yield results pertaining to policies in Quebec, these findings must be interpreted with caution as they may be a reflection of the study's exclusion of sources not in English. Further research inclusive of French resources is recommended.

Policies on Teaching and Incorporating Indigenous Content

Five out of the ten provinces, and one of the three territories (British Columbia, Alberta, Saskatchewan, Ontario, Nova Scotia, and the Northwest Territories (NWT)) were found to have implemented a policy directing teachers to teach and/or incorporate Indigenous content (Alberta Government, 2020; BC Teachers Council, 2019; Government of Saskatchewan, 2018; NS Department of Education, 2002, 2015; NWT Department of Education, 2004; Ontario Ministry of Education, 2007). Beginning in western Canada, British Columbia's *Standards for Educators Policy*, implemented in 2019, outlines expectations of teachers. It states that teachers are to teach curricula from Canadian, First Nations, Inuit, Métis, and global perspectives and that they must "critically examine their own biases, attitudes, beliefs, values and practices" in the classroom (BC Teachers Council, 2019, p. 5). Such personal awareness is often an objective of Indigenous cultural safety training set out for teachers, as well as those who work in cognate fields such as public health (Korteweg & Fiddler, 2018; Webb et al., in press). In comparison, Alberta's 2020 *Teaching Quality Standard Policy* encouraged K-12 teachers to invite Indigenous Elders and Knowledge Keepers into their classrooms to "foster effective relationships" (Alberta Government, 2020, p. 4). Under this policy, teachers must also enhance their "understanding of First Nations, Métis, and Inuit worldviews, cultural beliefs, languages and values" (p. 4) as well as incorporate Indigenous content for the benefit of all students (Alberta Government, 2020).

Saskatchewan's *Inspiring Success: First Nations and Métis Pre K-12 Education Policy Framework*, was implemented in June 2018, and is a comprehensive framework set out to guide teachers to teach and incorporate Indigenous content to shape the learning outcomes and experiences of all students

(Government of Saskatchewan, 2018). The policy framework seeks to make education more inclusive and supportive, by way of creating a learning environment that is both beneficial and equitable for all First Nations, Métis, and non-Indigenous students and teachers. The framework is led by six policy imperatives, with the first grounded in upholding Treaty and constitutional obligations as they relate to Saskatchewan's, and the Constitution of Canada's, Treaty relationships with First Nations and Métis peoples. Under this imperative the provincial education system is reminded of its responsibility to reflect and affirm these relationships in all aspects of education so that First Nations and Métis students feel they belong, and all Saskatchewan learners understand the significance of where they live" (Government of Saskatchewan, 2018, p. 8). The framework is explicit in the intentions of the Saskatchewan's MOE to advance the process of truth and reconciliation with Indigenous peoples. Furthermore, resources that are rich in information on Indigenous histories, policies, and the TRC, such as handouts for teachers, online tools, and curriculum checklists and guidelines, are available to teachers to ensure that their actions align with the policy objectives (Government of Saskatchewan, n.d.).

In the Atlantic provinces, Nova Scotia operates on two policies regarding Indigenous content in schools: *Nova Scotia's Action Plan for Education* (2015) and the *2002 Racial Equity Policy*. The *Action Plan for Education* commits the MOE to incorporating Mi'Kmaq content into the curriculum and plans to "develop equity education programs that highlight Acadian, African Nova Scotian, and Mi'kmaq cultures, and provide them to students and staff" (NS Department of Education, 2015, p. 43). The *Racial Equity Policy* ensures the development of culturally appropriate and relevant curricula that are specific to Mi'Kmaq culture and the maintenance of culturally safe schools (NS Department of Education, 2002). Furthermore, the policy recommends mandatory anti-racism and cross-cultural understanding training for all teachers as part of the policy implementation procedures. In this review, provincial policies on K-12 teachers teaching Indigenous content were not identified in New Brunswick, Prince Edward Island, or Newfoundland and Labrador.

Resources to Support Teachers

This review found eight out of 13 P/T MOEs provide supportive resources for teachers to teach and/or incorporate Indigenous content safely into curricula (see Table 2). To our knowledge, only Quebec and the Atlantic provinces do not provide specific resources.⁵ The Manitoba MOE for example, houses an online tool *Incorporating Aboriginal Perspectives: A Theme-Based Curricular Approach* that provides frameworks, curriculum materials, and templates to guide teachers in their efforts to incorporate and infuse Indigenous perspectives into curricula at all grade levels (Manitoba Education, n.d.). Elementary and secondary school teachers are directed to the resource "*Treaty Relations Commission of Manitoba*", an interactive online platform to assist teachers in their lessons on Treaty education (Treaty Relations Commission of Manitoba, n.d.). The Alberta MOE also provided a similar interactive online tool, showcasing an assortment of webinars on various dimensions of First Nations, Métis, and Inuit teachings (e.g., connection to the land, oral tradition, well-being, etc.) with directions for teachers on how to incorporate Indigenous perspectives into all aspects of curriculum (Learn Alberta, n.d.). In comparison, the Ontario MOE connects K-12 teachers to classroom resources offered by Indigenous Services Canada, as well as provides templates, tools, and other curricula supplies (Ontario Ministry of Education, n.d.). Such resources are separated according to K-8 and 9-12 grade levels. Meanwhile, in the NWT resources are available for teachers to incorporate content, from as early as 1993 and last updated in 2020 (NWT Department of Education, n.d.a). Until 2010, all K-12 teachers were required to take a cultural orientation two-day workshop to improve their understanding and knowledge of First Nations, Métis, and Inuit cultures, histories, traditions, and values; this policy has since been revoked and replaced by the *Indigenous Languages and Education Policy*, implemented in 2018 (NWT Department of Education, n.d.). The

⁵ Resources may be provided internally within the MOE and/or local school districts/school boards that are inaccessible to the public. Furthermore, the language limitations of this research may restrict the collection of available policies and resources from the Quebec and New Brunswick MOE. Further research is recommended to investigate the reasoning behind absent resources in the Atlantic provinces, as well as to include resources in French to allow for a greater and more accurate search on the Quebec and New Brunswick MOE.

Indigenous Languages and Education Policy promotes the indigenization⁶ of education spaces, and aims to ensure “Indigenous language instruction and culture-based school programs are supported and adequately resourced” with “improved program guidelines, training, funding, and accountability measures” to keep teachers accountable for their roles and responsibilities in sustaining the indigenization process (NWT Department of Education, n.d.b.).

Indigenous Content in K-12 Curriculum

To our knowledge, across Canada there are many ministerial efforts to include Indigenous content in either all or portions of the K-12 curricula. Under Manitoba’s province-wide initiative, *Incorporating Aboriginal Perspectives: A Theme-Based Curricular Approach*, First Nations, Métis and Inuit perspectives are incorporated into all subject areas, and Indigenous languages and cultures are taught as separate subjects from grades K-12 (Manitoba Education, n.d.). Similarly, under Ontario’s *First Nation, Métis, and Inuit Education Policy Framework*, implemented in 2007, school boards and schools across the province are responsible for the “integration of educational opportunities to significantly improve the knowledge of all students and educators in Ontario about the rich cultures and histories of First Nation, Métis, and Inuit peoples” as well as the “integration of Indigenous content in curriculum” (Ontario Ministry of Education, 2007, p. 7). As a result, Ontario is working towards including Indigenous content into each subject at all grade levels (Ontario Ministry of Education, 2016, 2016a). Likewise, Nova Scotia, Prince Edward Island, and all three territories incorporate Indigenous content through history, culture, language, and/or treaty education to each grade group from K-12.

In summary of this portion of the first review, it is strongly evident that in the last decade most provinces and territories have implemented their own unique policy, policy framework, action plan and/or specific resources to support teachers in facilitating the decolonization process of K-12 classrooms. These actions reflect concrete steps towards addressing the TRC recommendation 63.1 to “develop and implement kindergarten to grade twelve curriculum and learning resources on Aboriginal peoples in Canadian history, and the history and legacy of residential schools” (TRC, 2015, p. 7) through ministerial policy discourse. Teachers who have not received adequate training nor resources to safely teach and incorporate Indigenous content jeopardize the meaning behind the lessons for both Indigenous and non-Indigenous students. In this respect, there is also the risk of delivering lessons on Indigenous content in a culturally unsafe manner. This may look like disrespecting traditional Indigenous knowledge and histories or playing into harmful stereotypes of Indigenous peoples (Nolan & Weston, 2015; Tupper, 2011). Thus, an effective way to address the TRC’s Call to Action 63.1 may be to provide policy-driven support to improve teacher’s access to resources and education with principles of cultural safety at the forefront. This process may be further enhanced with the coordinated efforts of post-secondary pre-service teacher education programs in their courses and strategies to prepare and support teachers in teaching Indigenous content.

Review #1—Education Policy: Post-Secondary Institutions

This portion of the rapid review is an extensive search of Bachelor of Education (B.Ed.) programs across Canada to determine which universities offer either (a) an Indigenous stream, (b) Indigenous courses, or (c) Indigenous content infused in all or a portion of pre-service teacher education.⁷ From this review, New Brunswick was the only province to which no B.Ed. program had an identifiable Indigenous stream. Moreover, in two of five Ontario and the only one Newfoundland and Labrador B.Ed. programs, the Indigenous streams are offered exclusively to self-identified Indigenous students.

Across Canada, we found that all provinces and territories offer a B.Ed. program with most having an option to enrol in an Indigenous stream for both Indigenous and non-Indigenous students. Table 3 provides an overview of the number of B.Ed. programs, length of each program, the availability of an Indigenous stream, and an indication on whether Indigenous content is infused in curriculum. The ma

⁶ Indigenization refers to “bringing Indigenous knowledge and approaches together with Western knowledge systems” (Antoine et al., 2018, p. 1).

⁷ B.Ed. programs in this review include only those that are a B.Ed. undergraduate degree and do not include B.Ed. related programming below or above the bachelor’s level (e.g., college level, master’s, earned doctorate, etc.), in order to maintain consistency and allow for accurate comparisons across programs and their required/optional courses within the B.Ed. program.

majority of B.Ed. programs require Indigenous education courses for pre-service teachers to complete, as 27 out of 43 B.Ed. programs explored (63%) contain mandatory as opposed to optional courses, regardless of the B.Ed. stream the student is enrolled in (e.g., primary, junior, senior, or an Indigenous-specific stream). Of the mandatory courses, many universities focus on curriculum development and instruction, and how to safely infuse Indigenous worldviews and perspectives into classroom lessons while continuing to instruct on Eurocentric (western) teachings (e.g., University of Northern British Columbia, Vancouver Island University, University of Saskatchewan, University of Manitoba, Lakehead University, Laurentian University of Sudbury, University of Ottawa, Acadia University, University of Prince Edward Island). Universities also implement other strategies to ensure pre-service teachers are well prepared to incorporate Indigenous content, such as Indigenous languages and histories, as will be discussed later.

The University of British Columbia for example, offers the course *Aboriginal Education in Canada*, designed specifically to aid pre-service teachers to incorporate Indigenous worldviews into their future classrooms when in professional practice (University of British Columbia, n.d.). In comparison, the University of Saskatchewan takes one step further and provides mandatory courses on Treaty education, including how to integrate First Nations, Métis, and Inuit content in the curriculum; anti-racism education; and a mandatory practicum in an Indigenous community or local school with a high Indigenous population (University of Saskatchewan, n.d.). Trent University in Peterborough, Ontario offers pre-service teachers the opportunity to complement their B.Ed. studies with a certificate program *‘Learning from the Land and Indigenous People Camp for Teachers.’* The objective is for students to fully immerse themselves with the content and learn Indigenous teachings outside the formal western classroom format (Trent University, n.d.).

Wilfrid Laurier University in Waterloo, Ontario does not offer a specific Indigenous stream within its B.Ed. program, rather, the university requires mandatory courses throughout both primary and junior streams, and junior and intermediate streams titled *Diversity Series: First Nations, Métis and Inuit (FNMI) Topics in Educational Contexts*. The university upholds a “commitment to Indigenous Education” as “Indigenous content and ways of knowing pervade all of [Wilfrid Laurier University] courses” (Wilfrid Laurier University, n.d.). The University of Northern British Columbia (UNBC) in Prince George, Yukon University in Whitehorse, Aurora College in Fort Smith, Northwest Territories, and Nunavut Artic College in Iqaluit offer courses led by Indigenous instructors across all subject areas in their respective B.Ed. programs. UNBC’s entire program is based on an infusion of both Indigenous and western worldviews, with Indigenous ways of knowing leading the program (UNBC, 2021). Meanwhile, at Yukon University pre-service teachers are also trained to “employ culturally responsive teaching practices” (Yukon University, 2021, p. 2) that must be relevant to First Nation students and attend a one-week summer cultural camp to learn directly from Indigenous Knowledge Keepers on and from the land.

Table 3

Post-Secondary Bachelor of Education (Teaching Degrees) in Canada and Inclusion of Indigenous Programs and/or Content

Province/ Territory	Number of Universities with B.Ed. program	Indigenous Stream Available	Program Length	Indigenous Courses/ Content in B.Ed. Curricula
British Columbia	7	3 of 7	11 months – 2 years	6 of 7 (M)
Alberta	4	2 of 4	2 years	3 of 4 (M/O)
Saskatchewan	2	1 of 2	4 years	2 of 2 (M)
Manitoba	3	1 of 3	2 years	3 of 3 (M)
Ontario	14	5 of 14*	1 – 3 years	13 of 14 (M/O)
Quebec	2	1 of 2	2 years	2 of 2 (M/O)
New Brunswick	2	None identified	10 – 11 months	2 of 2 (M/O)

Province/ Territory	Number of Universities with B.Ed. program	Indigenous Stream Available	Program Length	Indigenous Courses/ Content in B.Ed. Curricula
Nova Scotia	4	2 of 4	16 months – 2 years	3 of 4 (M/O)
Prince Edward Island	1	1 of 1	1 year	1 of 1 (M)
Newfoundland & Labrador	1	1 of 1**	2 years	N/A
Yukon	1	1 of 1	2 years	1 of 1 (M)
Northwest Territories	1	1 of 1	4 years	1 of 1 (M)
Nunavut	1	1 of 1	4 years	N/A

M: Indigenous education courses are mandatory; O: Indigenous education courses are optional; and M/O: Mixture of mandatory and optional Indigenous education courses

* Two of the five Indigenous streams are offered only to self-identified Indigenous students (Trent University and the University of Ottawa)

** Only offered to self-identified Indigenous students

Strategies in the form of the courses, workshops, or availability of Indigenous education streams as described above hold promise to equip teachers with the necessary skills, tools, and knowledge to safely teach Indigenous content in a respectful way. However, there is more to the story, as there is reason to believe that to strengthen B.Ed. programs in Canada, universities must also build their capacity to sustain and promote Indigenous-infused B.Ed. programs. Despite the institutional efforts described above, in 2015, the Canadian Teachers' Federation found that only 36% of in-service teachers in Canada received formal training on Indigenous content in their post-secondary education degrees. Of this, less than 20% of teachers rated their knowledge on First Nations, Métis and/or Inuit cultures and histories as strong (CTF, 2015). Mashford-Pringle and Nardozi (2013) found similar knowledge gaps among pre-service teachers when evaluating the learning outcomes of a cultural awareness training workshop provided to B.Ed. students. Post-secondary institutional efforts to train and prepare pre-service teachers to teach and incorporate Indigenous content go only as far as their participatory reach. Mandatory courses may offer a solution, however, will require effective methods to keep students engaged (Nardozi et al., 2014). These findings suggest a need to couple B.Ed. courses, workshops, Indigenous education streams, with promotional efforts to encourage participation among pre-service teachers.

It is also important to note that while many K-12 and post-secondary education systems are working towards inclusion of Indigenous content, most do not have explicit decolonization plans outlining how and why this work is important or will be completed (Greenfield, 2020). There are gaps as to how the content will be incorporated, and who is best to teach it. An absence of policy statements, frameworks, and plans within education systems lessens teachers' responsibilities and withholds their accountability to comply with embedding Indigenous content within their classrooms and curricula. Policy statements, frameworks, and plans may target teachers who may not have begun a decolonizing journey or simply do not believe Indigenous content is an important piece to be included within curriculum (Greenfield, 2020; Nolan & Weston, 2015; Tupper, 2011).

Review #2—Teacher Experience

What is known about the level of preparedness of settler teachers to teach Indigenous content?

The literature sheds light onto similar experiences for pre-service teachers in their attempt to learn and teach Indigenous content, as well as common aspects and elements to pre-service teacher training

programs that have an impact on their level of preparedness. Four broad themes emerged from the literature and are described in the following sections: 1) building relationships, 2) challenging personal beliefs, 3) establishing safe spaces, and 4) addressing ongoing obstacles pre-service teachers face as they navigate the process of decolonizing education.

The Importance of Relationship Building with Indigenous Community Partners

Relationship building with Indigenous community partners is a key element to pre-service teacher programming that in turn decolonizes public classrooms (Keliipio et al., 2018; Korteweg & Fiddler, 2018; Petten, 2000; Stagg-Peterson et al., 2019; Vetter et al., 2014). For example, pre-service teachers at York University's Teacher Education Program may enroll in the First Nation, Métis, and Inuit *Infusion* program (referred to hereafter as *Infusion*) set out to build and maintain community partnerships and normalize the practice of inviting Knowledge Keepers and Elders into the classroom (Vetter et al., 2014).⁸ The *Infusion* program includes a component for pre-service teachers to travel to Indigenous communities, organizations, or local schools with a high population of self-identified Indigenous students where the pre-service teachers may be introduced to multiple Indigenous cultures and cultural practices. As Vetter et al. (2014) described, "it led teacher candidates to demonstrate their understanding that diversity exists within and between Aboriginal peoples and communities" and that their understandings of traditional culture and practices is not to be generalized (p. 313). For example, pre-service teachers described this learning when sharing their experiences travelling to Nunavut to teach in local schools. Pre-service teachers found that students in the Nunavut community would share their lunches with all other students in the classroom, specifically fruit. This simple gesture reflects cultural differences, as sharing food generally goes against school policy in the pre-service teachers' local Ontario schools (Vetter et al., 2014).

Building relationships is especially important for pre-service teachers due to the level of distrust manifested between Indigenous peoples and Canadian governments as a result of past and current colonial policies (i.e., the *Indian Act*, IRS, child welfare system, correctional services). Education has been the site of oppression against Indigenous peoples, knowledges, and ways of being, thus, it is increasingly urgent for pre- and in-service teachers to build true and authentic relationships to reduce the distrust inflicted upon Indigenous peoples (Murray-Orr & Mitton-Kukner, 2017; Oskineegish, 2015). Since colonialization, federal and provincial governments have attempted to erase Indigenous stories, languages, cultures and knowledges through means of 'education'. This has historically occurred through IRS—as Stonechild (2006) describes as labour camps as opposed to public education—and most recently through cultural neglect in provincial curricula (Oskineegish, 2015; Stagg-Peterson et al., 2019).

To overcome the challenge of distrust, literature suggested that when teaching in-community or specifically to Indigenous students, settler teachers must prioritize forming new, respectful, and trusting relationships with their students and communities. Researchers recommend teachers first gain familiarity with their home-community, the protocols, cultures, and languages, so as to build relationships and set the foundation to learn and teach in and with the community members and students (Murray-Orr & Mitton-Kukner, 2017; Vetter et al., 2014). Oskineegish (2015) further advised to shape lesson plans around the community's local environment, as well as to be mindful that plans will change and are dependent on the needs specific to the students, which may be in direct contradiction to standardized curriculum set forth by provincial or territorial governments. Sense of community is a primary Indigenous determinant of health (Reading & Wein, 2009) thus, holds vital importance to create culturally appropriate lessons on Indigenous content. Prioritizing community relationships may therefore be treated as a precursor to improving teacher's preparedness to teach Indigenous content.

To this end, relationship building between teachers and students may be compared to the outcomes of a double-edged sword. Students and school personnel often feel the impact of "outsider fatigue" (Vetter et al., 2014, p. 313) as enthusiastic settler teachers continue to arrive and engage with communities, only to leave their relationships behind as they complete their short-lived teaching placement (Vetter et al., 2014). Indigenous children and youth become attached to teachers, especially in rural and remote communities. The communities then have rapid turnover of teachers and students become disengaged with

⁸ In reference to the *Infusion* program implemented prior to the current York University WAABAN Indigenous Teacher Education program. WAABAN is a B.Ed. program available to Indigenous and non-Indigenous pre-service teachers, and is grounded in Indigenous knowledges, teachings, and worldviews. The program is taught by Elders, community members, and community leaders (York University, n.d.).

learning, however, are forced to stay in school until the age of sixteen in most provinces and territories (Battiste, 2010; Mashford-Pringle, 2016, 2017). This then discourages them from furthering their education or following learning journeys as they have not had an Indigenous role model or educator interested enough to extend their term in community. This experience thus becomes another form of trauma for students (Battiste, 2010; Mashford-Pringle, 2016, 2017). This challenge calls for improved policy efforts to recruit and retain teachers in rural and remote areas as well as in Indigenous communities.

Challenging Personal Belief Systems

The process of challenging personal belief systems in pre-service teacher programming is the second theme that emerged from the literature as impacting teacher preparedness to teach Indigenous content. This process prompts settler teachers to address preconceived personal beliefs and implicit biases, as well as build awareness of the common stereotypes and microaggressions often subconsciously targeting Indigenous students (Marom, 2019). Korteweg and Fiddler (2018) described challenging personal belief systems as triggering “settler disruptions” (p. 259), as non-Indigenous pre-service teachers confront their misunderstandings and biases. For example, in their teacher education program at Lakehead University, Korteweg and Fiddler (2018) led the pre-service teachers through “critical self-examinations and deconstructions of the systemic and institutionalized racism that has benefitted all White Canadians, including White teachers” (p. 267). White-settler pre-service teachers learned how their positionality and race has benefitted them throughout their education journey, compared to their Indigenous peers, as one student stated, “people tend to expect the best, rather than the worst from me because of the colour of my skin” (p. 267). This process also sheds light on the realities of institutionalized racism, prompting personal reflection, as one student shared the following thought: “I grew up right beside Indigenous people in Thunder Bay, for my whole life, but didn’t know enough so I easily accepted stereotypes” (p. 268).

The University of Northern British Columbia cultural safety course, as part of the B.Ed. program, also addresses institutionalized racism by encouraging pre-service teachers to reflect critically on current K-12 curricula mandated by Canadian provinces. In Harrison et al.’s (2012) evaluation of the program, they found that as pre-service teachers look into the underlying ideologies, values, and worldviews of the curricula, students quickly recognize the lack of Indigenous knowledges across subject areas; a lack of diversity also known to exist in lesson plans and modes of assessment for K-12 students (Marom, 2019). Moreover, pre-service teachers are encouraged to consider the impacts this lack of diversity may have on cultural safety within education systems as well as the accessibility of the content for Indigenous students (Harrison et al., 2012). With this level of reflection, pre-service teachers will become aware of their implicit biases in the classroom, as well as see the potential of their role as future teachers to shift the focus of current curricula to incorporate Indigenous content and improve its accessibility for all students.

Despite its benefits, challenging personal belief systems is not easy for all pre-service teachers; as some do not possess the skills, or interest, are unable or unwilling to recognize their personal biases. Additionally, some pre-service teachers struggle to acknowledge their own acts of racism, stemming from unconscious privilege and positionality (Korteweg & Fiddler, 2018). This creates challenges for pre-service teachers to recognize cultural appropriations in the classroom and everyday life. For example, Korteweg and Fiddler (2018) found that some pre-service teachers taught on the land by Knowledge Keepers fail to recognize the relationship between Indigenous peoples and the land, as they are blinded by their own experiences at summer camps and settler-led wilderness canoe trips. Students are “shocked to contend with their settler privilege of wilderness access or special place-based communion at the expense of Indigenous peoples’ sovereignty on their own territories” (p. 266). Some are unable or unwilling to critically reflect on their personal experiences as outcomes of privilege and through the lens of possible cultural appropriation. This mindset prevents pre-service teachers from recognizing the significance of learning from Knowledge Keepers, as well as the importance of creating similar opportunities for their future students.

Nevertheless, scholarly literature points to the benefits and challenges as settler teachers come to terms with their personal biases and find comfort in the uncomfortable. These practices ultimately lead to improved preparedness of settler teachers to teach and incorporate Indigenous content into their classroom curriculum (Harrison et al., 2012; Tupper, 2011), as they learn the significance and vital importance to uplift and revitalize Indigenous knowledges and ways of knowing in education systems – a

key component to the decolonization process (Antoine et al., 2018).

Safe Space for Questions

Many pre-service teachers found that a safe space to ask questions and engage with Indigenous content helped to improve their level of preparedness (Keliipio et al., 2018). Although establishing a culturally safe environment is a complex process, it requires participants to critically reflect and challenge personal belief systems while also learning about Indigenous and other cultures in relation to their own (Northern Health, n.d.). Non-Indigenous pre-service teachers at Simon Fraser University explained that their richest learning experience came from speaking with and listening to Indigenous Elders and Knowledge Keepers during a Burning Ceremony at the university (Keliipio et al., 2018). Pre-service teachers at York University asked questions about Indigenous cultures to avoid generalizations and to learn from the many unique Indigenous knowledges (Vetter et al., 2014). In all events, questions were encouraged to build pre-service teachers' comfort in not knowing and their confidence to teach content.

Ongoing Challenges for Pre-Service Teachers

The literature uncovers common challenges that pre-service teachers share in their preparation to learn and to teach Indigenous content. Such challenges may warrant further exploration to inform development of teacher supports, resources, or training. One common challenge was **the lack of confidence** among pre-service teachers when attempting to teach Indigenous content. For some, this lack of confidence translates in a fear of offending Indigenous peoples, as they experience discomfort in acknowledging and discussing the assimilative and destructive impacts of colonialization in education (Korteweg & Fiddler, 2018; Nardozi et al., 2014; Vetter et al., 2014). This fear exhibits the role of a "perfect stranger" (Dion, 2007, p. 306; Nardozi et al., 2014, p. 114; Vetter et al., 2014, p. 331). Meaning, some pre-service teachers felt as though their being of settler and non-Indigenous statuses inhibited their ability to teach Indigenous content. This argument is common in the literature to justify hesitation to incorporate Indigenous content into lesson plans; however, Dion (2007) suggested that the perfect stranger argument is a gateway to avoid discomfort on the part of the students. With this mindset teachers fail to recognize that teaching Indigenous content is a simultaneous learning experience for both teachers and students – an area of research in which to expand upon.

Settler teachers' epistemologies (i.e., ways of knowing (Couper, 2020)) pose additional barriers to comfortably and safely teach and incorporate Indigenous knowledge in teacher's lesson plans. Epistemologies are ways of gathering, interpreting, and sharing knowledge, based on individual and unique lived experiences shaping one's beliefs and knowledge systems of the world around them (Couper, 2020). As such, literature describes settler teachers as entering classrooms with a "dehumanised" view of Indigenous peoples, framing their understanding of Indigenous cultures based on Western teachings and ideologies e.g., Western-based epistemologies (Dion, 2009). Teacher experiences described by Dion (2009) suggest that such perceptions do not change until teachers are confronted with Indigenous teachings on unique cultures and histories (Dion, 2009). Scholars also describe how teachers struggle to challenge their understandings of mandatory curricula, and how the worldviews embedded in the lessons have come to be (Dion, 2007). Eurocentric epistemologies are deeply interwoven into current curriculum across Canadian provinces instilling colonial ideals, rendering some teachers to subconsciously act on racist behaviours towards Indigenous peoples (Dion, 2007; Harrison et al., 2012). This therefore further highlights the need to dismantle current curricula and push towards preparing teachers with decolonizing teaching practices.

A final challenge stems from **settler teachers searching for Western approaches to teach Indigenous material**. Despite their previous education and training on lesson planning, researchers suggest settler teachers often struggle with how to incorporate Indigenous content into their curriculum (Canadian Teachers' Federation [CTF], 2015). Teachers will search for curriculum support services, guidelines, and evaluation rubrics with grounding in standard interpretations of evaluation to accompany their lesson plans (CTF, 2015; Mashford-Pringle & Nardozi, 2013; Nolan & Weston, 2015; Tupper, 2011). They are often fixated on Western approaches to Indigenous teachings. Until such colonial methods are disrupted, teachers will continue to be blinded by settler worldviews, posing barriers to effectively teach and appreciate Indigenous knowledges.

In summary, most scholars describe the uncomfortable nature of questioning and confronting one's personal belief systems and identities when learning or preparing to teach cultural material that is not of their background. Although, these challenging steps are often characterized as precursors to becoming a "culturally responsive" educator, meaning, to be cognizant of the power and impacts of positionalities, stereotypes, and cultural differences between Indigenous and non-Indigenous students and teachers; and bringing this awareness into the classroom (Keliipio et al., 2018, p. 352; Oskineegish, 2015, p. 7). Nevertheless, literature points to cultural safety training as an opportunity for teachers to grow and develop foundational attributes so as to foster a culturally inclusive and safe environment; as is vital to establishing decolonized education spaces (Keliipio et al. 2018). The findings of this study, therefore, point to the value and need for Indigenous cultural safety training for all teachers.

Conclusion

Cultural safety can transform power imbalances, neutralize institutional discrimination, and address the effects of colonization. (Harrison et al., 2012, p. 324)

Cultural safety is paramount for educators. Stonechild (2006) and the Truth and Reconciliation Commission (2015) stated that it was education that brought us here and it will be education that will assist in changing attitudes and beliefs about Indigenous peoples. With this in mind, this paper uncovers resources that are available to teachers in K-12 schools to prepare and support them in teaching or incorporating Indigenous content in a culturally safe manner, and details what is known about their level of preparedness to do so. Informed by two rapid reviews of grey and academic literature, the findings reveal a variety of policies, frameworks, initiatives, and programming implemented across Canadian provinces and territories MOE which aim to support teachers. Many of the post-secondary institutions in Canada that offer a B.Ed. degree have incorporated mandatory courses to guide and teach pre-service teachers how to safely incorporate Indigenous content into their curricula, with a few universities offering a specialized Indigenous stream for pre-service teachers to select. This study finds growing support by provincial and territorial governments and academic institutions to incorporate Indigenous content for pre- and in-service teachers to teach through course-, workshop-, and/or policy-based interventions and resources.

Moreover, teacher education programs prepare their students to incorporate Indigenous worldviews into their lesson plans in a culturally safe manner by placing emphasis on true and authentic relationship building with Indigenous peoples, leaders, and community partners; encouraging non-Indigenous pre-service teachers to challenge their personal biases and positionalities, and establishing a safe space for teacher candidates to ask questions and engage fully with the content. Despite institutional and academic efforts, however, the findings of this study reveal also the continued challenges that pre-service teachers face in confronting their roles and responsibilities as settlers within education spaces. As teachers, their responsibility based on their career is to teach students; but as non-Indigenous settler teachers working on the traditional land of Indigenous peoples, their responsibility surpasses this expectation. In their position as educators, teachers and their lesson plans are a means to act on the Truth and Reconciliation Commission's Calls to Action. The TRC calls teachers to educate all students on Indigenous issues and histories, and to create culturally inclusive and safe environments for Indigenous students, respectful and mindful of Indigenous ways of learning and being (Korteweg & Fiddler, 2018; Marom, 2019; Mashford-Pringle & Nardozi, 2013; Vetter et al., 2014). As Korteweg and Fiddler (2018) explained, teachers

need to carry the core responsibility of implementing reform efforts to develop curriculum that represents accurate historical truths, respect[s] Indigenous knowledge systems and perspectives, as well as promote[s] holistic Indigenous pedagogies for greater understandings and well-being for all students in K-12 education. (p. 255)

Without a meaningful connection to Indigenous content, non-Indigenous pre-service teachers may feel restricted in meaningfully and respectfully teaching Indigenous issues, or having Elders teach tra-

ditional knowledges in the classroom. Further, by incorporating Indigenous content into school curricula, teachers have the potential to indigenize education, meaning to dismantle traditional colonial and culturally assimilating practices, to infuse properly Indigenous ways of knowing; a key step towards decolonization (Antoine et al., 2018; Korteweg & Fiddler, 2018; Murray-Orr & Mitton-Kukner, 2017). The findings of this study demonstrate cultural safety teacher training is a means towards MOE and PSE institutional goals of reconciliation with Indigenous peoples, but it is a start of a learning journey that will assist with reconciliation and not an end to itself. Training teachers to *safely* teach and integrate Indigenous content is not only a matter of adjusting the scope of education to reduce settler biases and harmful stereotypes, but also helps teachers to establish new connections and relations with Indigenous peoples that are respectful and empathic to the impacts of colonization (Dion, 2008; Harrison et al., 2012; Keliipio et al., 2018; Murray-Orr & Mitton-Kukner, 2017; Vetter et al., 2014).

Nevertheless, the dearth of research evaluating the impacts of provincial and territorial policies covering Indigenous content or the implementation of Indigenous content in pre-service teacher education is necessary to direct policy development and to answer the TRC Calls to Action. Future research should examine the long-term impacts of the institutional interventions this paper explores, to determine effectiveness and best practices to advance institutional policies, plans, and all steps towards decolonization. As governments and school boards focus their attention on evidence-based recommendations of the TRC, now is the time to help support administrators looking to effectively integrate Indigenous knowledges into curriculum, as well as the teachers responsible to teach the content.

References

- Alberta Government. (2020). *Alberta education teaching quality standard*. <https://open.alberta.ca/dataset/4596e0e5-bcad-4e93-a1fb-dad8e2b800d6/resource/75e96af5-8fad-4807-b99a-f12e26d15d9f/download/edc-alberta-education-teaching-quality-standard-2018-01-17.pdf>
- Antoine, A., Mason, R., Mason, R., Palahicky, S., & Rodriguez de France, C. (2018). *Pulling together: A guide for curriculum developers*. BCcampus. <https://opentextbc.ca/indigenization>
- Battiste, M. (2010). Nourishing the learning spirit: Learning is our purpose in life. *Canadian Education Association*, 50(1), 14-18.
- British Columbia (BC) Teacher's Council. (2019). *Professional standards for BC educators*. https://www2.gov.bc.ca/assets/gov/education/kindergarten-to-grade-12/teach/teacher-regulation/standards-for-educators/edu_standards.pdf
- Canadian Teachers Federation. (2015). *CTF survey on teachers' perspectives on Aboriginal education in public schools in Canada: Summary report*. <https://files.eric.ed.gov/fulltext/ED602836.pdf>
- Couper, P. R. (2020). Epistemology. In A. Kobayashi (Ed.), *International encyclopedia of human geography* (2nd ed., pp. 275-284). Elsevier.
- Dion, S. (2007). Disrupting molded images: Identities, responsibilities and relationships - teachers and Indigenous subject material. *Teaching Education*, 18(4), 329-342.
- Doerr, A. (2015). *Royal commission on Aboriginal peoples*. The Canadian encyclopedia. <https://www.thecanadianencyclopedia.ca/en/article/royal-commission-on-aboriginal-peoples>
- Government of Saskatchewan. (n.d.). *Supporting reconciliation in Saskatchewan schools*. https://www.edonline.sk.ca/webapps/blackboard/content/listContent.jsp?course_id=_3514_1&content_id=_129667_1&mode=reset
- Government of Saskatchewan. (2018). *Inspiring success: First Nations and Métis preK-12 education policy framework*. <https://publications.saskatchewan.ca/api/v1/products/90278/formats/107115/download>
- Greenfield, E. (2020). *Supporting Indigenous student success in post-secondary education: Thriving from application to graduation*. Samuel Centre for Social Connectedness. <https://www.socialconnectedness.org/wp-content/uploads/2020/09/PDF-Supporting-Indigenous-Student-Success.pdf>

- Harrison, E. B., Lautensach, A. K., & McDonald, V. L. (2012). Moving from the margins: Culturally safe teacher education in remote Northwestern British Columbia. *McGill Journal of Education*, 47(3), 323-344.
- Keliipio, K., Perry, K., & Elderton, C. (2018). A collaborative sharing of stories on a journey toward reconciliation: "Belonging to this place and time". *McGill Journal of Education*, 53(2), 350-361.
- Korteweg, L., & Fiddler, T. (2018). Unlearning colonial identities while engaging in relationality: Settler teachers' education-as-reconciliation. *McGill Journal of Education*, 53(2), 254-275.
- Learn Alberta. (n.d.). *Walking together: First Nations, Métis, and Inuit perspectives in curriculum*. <https://www.learnalberta.ca/content/aswt/>
- Library and Archives Canada. (2016). *Report of the royal commission on Aboriginal peoples*. <https://www.bac-lac.gc.ca/eng/discover/aboriginal-heritage/royal-commission-aboriginal-peoples/Pages/final-report.aspx>
- Manitoba Education. (n.d.). *Indigenous Education*. <https://www.edu.gov.mb.ca/k12/abedu/perspectives/resources.html>
- Manitoba Education. (n.d.a). *Indigenous education: Incorporating Aboriginal perspectives: A Theme-based curricular approach*. <https://www.edu.gov.mb.ca/k12/abedu/perspectives/index.html>
- Marom, L. (2019). Under the cloak of professionalism: Covert racism in teacher education. *Race Ethnicity and Education*, 22(3), 319-337.
- Mashford-Pringle, A. (2016). Aboriginal health and Aboriginal education are interconnected. *Special Social Groups, Social Factors and Disparities in Health and Health Care (Research in the Sociology of Health Care)*, 34, 85-96. <https://doi.org/10.1108/S0275-495920160000034005>
- Mashford-Pringle, A. (2017). *Dropping out and going back to school: Quebec region First Nations regional early childhood, education and employment survey*. http://cssspnql.com/docs/default-source/EREEE-2014/cahier_ereee_decrochage_etudes_eng_web.pdf?sfvrsn=2
- Mashford-Pringle, A., & Nardozi, A. (2013). Aboriginal knowledge infusion in initial teacher education at the Ontario Institute for Studies in Education at the University of Toronto. *The International Indigenous Policy Journal*, 4(4), 1-19. doi: 10.18584/iipj.2013.4.4.3
- Murray-Orr, A., & Mitton-Kukner, J. (2017). An exploratory case study of one early career teacher's evolving teaching practice in Northern Canada. *McGill Journal of Education*, 52(1), 71-92.
- Nardozi, A., Restoule, J. P., Broad, K., Steele, N., & James, U. (2014). Deepening knowledge to inspire action: Including Aboriginal perspectives in teaching practice. *Education*, 19(3), 108-122.
- Nolan, K., & Weston, H. (2015). Aboriginal perspectives and/in mathematics: A case study of three grade 6 teachers. *Education*, 21(1), 12-22.
- Northern Health. (n.d.). *Northern health Indigenous health: Cultural safety*. <https://www.indigenoushealthnh.ca/initiatives/cultural-safety>
- Northwest Territories Department of Education. (2002). *Aboriginal language and culture-based education: Departmental directive*. https://www.ece.gov.nt.ca/sites/ece/files/resources/ministerial_directive_-_departmental_directive_on_aboriginal_language_and_culture_based_education_2004.pdf
- Northwest Territories Department of Education. (n.d.). *Directive*. <https://www.ece.gov.nt.ca/en/resources-type/directive?page=2>
- Northwest Territories Department of Education. (n.d.a). *Education, culture, and employment*. https://www.ece.gov.nt.ca/en/resources?f%5B0%5D=field_resource_type%3A105&page=5
- Northwest Territories Department of Education (n.d.b). *Indigenous languages and education policy (JK-12)*. <https://www.ece.gov.nt.ca/en/services/indigenous-languages-and-education-secretariat/indigenous-languages-and-education-policy-jk>
- Nova Scotia (NS) Department of Education. (2002). *Racial equity policy*. http://studentservices.ednet.ns.ca/sites/default/files/RacialEquityPolicy_Webversion.pdf

- Nova Scotia (NS) Department of Education. (2015). *Nova Scotia's action plan for education 2015: The 3 R's: Renew, refocus, rebuild*. <https://www.ednet.ns.ca/sites/default/files/docs/educationactionplan2015en.pdf>
- Ontario Ministry of Education. (n.d.). *Curriculum and resources*. <https://www.dcp.edu.gov.on.ca/en/>
- Ontario Ministry of Education. (2007). *Ontario First Nation, Métis, and Inuit education policy framework*. <http://www.edu.gov.on.ca/eng/aboriginal/fnmiframework.pdf>
- Ontario Ministry of Education. (2016). *Resource guide. The Ontario curriculum grades 9-12. First Nations, Métis, and Inuit connections: Scope and sequence of expectations*. <http://www.edu.gov.on.ca/eng/curriculum/secondary/SecondaryFNMI.pdf>
- Ontario Ministry of Education. (2016a). *Resource guide. The Ontario curriculum grades 1-8 and the kindergarten program. First Nations, Métis, and Inuit connections: Scope and sequence of expectations*. <http://www.edu.gov.on.ca/eng/curriculum/elementary/elementaryFNMI.pdf>
- Oskineegish, M. (2015). Are you providing an education that is worth caring about? Advice to non-Native teachers in Northern First Nations communities. *Canadian Journal of Education*, 38(3), 1-25.
- Petten, C. (2000). Teachers for the North need particular training. *Windspeaker Publication*, 17(11), 24.
- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). (2009). *PRISMA 2009 checklist*. <http://prisma-statement.org/documents/PRISMA%202009%20checklist.pdf>
- Reading, C., & Wien, F. (2009). *Health inequalities and social determinants of Aboriginal peoples' health*. National Collaborating Centre for Indigenous Health. <https://www.nccih.ca/docs/determinants/RPT-HealthInequalities-Reading-Wien-EN.pdf>
- Royal Commission on Aboriginal Peoples (RCAP). (1996). *Report of the royal commission on Aboriginal peoples: Gathering strength* (Vol. 3). Libraxus.
- Stagg Peterson, S., Huston, L., & Loon, R. (2019). Professional lives and initial teacher education experiences of Indigenous early childhood educators, childcare workers, and teachers in Northern Ontario. *Brock Education Journal*, 28(2), 17-32.
- Stevens, A., Garritty, C., Hersi, M., & Moher, D. (2018). *Developing PRISMA-RR, a reporting guideline for rapid reviews of primary studies (Protocol)*. Equator Network. <https://www.equator-network.org/wp-content/uploads/2018/02/PRISMA-RR-protocol.pdf>
- Stonechild, B. (2006). *The new buffalo: The struggle for Aboriginal post-secondary education in Canada*. University of Manitoba Press.
- Thomas, J., & Higgins, J. (2019). Defining the criteria for including studies and how they will be grouped for synthesis. In J. Chandler, M. Cumpston, T. Li, M. Page, & V. Welch (Eds.), *Cochrane handbook for systematic reviews of interventions* (2nd ed., pp. 33-65). John Wiley & Sons.
- Treaty Relations Commissions of Manitoba. (n.d.). *Treaty education K-12*. <http://www.trcm.ca/treaty-education-initiative/>
- Trent University. (n.d.). *Learning from the Land and Indigenous people*. <https://www.trentu.ca/education/learning-land-and-indigenous-people>
- Truth and Reconciliation Commission (TRC) of Canada. (2015). *Calls to action*. http://trc.ca/assets/pdf/Calls_to_Action_English2.pdf
- Truth and Reconciliation Commission (TRC) of Canada. (2015a). *Honouring the truth, reconciling for the future*. https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Executive_Summary_English_Web.pdf
- Tupper, J. (2011). Disrupting ignorance and settler identities: The challenges of preparing beginning teachers for treaty education [Indigenous Education]. *Education*, 17(3), 38-55.
- University of British Columbia. (n.d.). *Indigenous education in UBC's teacher education program*. <https://teach.educ.ubc.ca/indigenous-education-in-ubcs-teacher-education-program/>

- University of Northern British Columbia (UNBC). (2021). *Education (B.Ed.) program*. <https://www2.unbc.ca/calendar/undergraduate/education>
- University of Saskatchewan (SK). (n.d.). *Indigenous education initiatives*. <https://education.usask.ca/indigenous-education/about.php>
- Vetter, D., Haig-Brown, C., & Blimkie, M. (2014). Culturally responsive teaching: Stories of a First Nation, Metis, and Inuit cross-curricular infusion in teacher education. *LEARNing Landscapes*, 8(1), 305-322.
- Wilfrid Laurier University. (n.d.). *Education (B.Ed.) program details*. <https://www.wlu.ca/programs/education/graduate/education-bed/program-details/index.html>
- Wilfrid Laurier University. (2021). *Diversity series: First Nations, Métis, and Inuit (FNIM) topics in educational contexts*. <https://academic-calendar.wlu.ca/course.php?c=61078&-cal=1&s=1009&y=83>
- York University. (n.d.). *Bachelor of Education (B.Ed.) – WAABAN Indigenous teacher education*. <https://www.yorku.ca/edu/students/waaban/>
- Yukon University. (2021). *Education (YNTEP) - After degree*. <https://www.yukonu.ca/programs/yntep-after-degree>

Appendix A

Ministries and Education and PSE Institutions Reviewed for Review #1

Ministries of Education	PSE Institutions
British Columbia	<ol style="list-style-type: none"> 1. Simon Fraser University 2. Thompson Rivers University 3. Trinity Western University 4. University of British Columbia 5. University of Northern British Columbia 6. University of Victoria 7. Vancouver Island University
Alberta	<ol style="list-style-type: none"> 8. Concordia University, College of Alberta 9. University of Alberta 10. University of Calgary 11. University of Lethbridge
Saskatchewan	<ol style="list-style-type: none"> 12. University of Regina 13. University of Saskatchewan
Manitoba	<ol style="list-style-type: none"> 14. Brandon University 15. University of Manitoba 16. University of Winnipeg
Ontario	<ol style="list-style-type: none"> 17. Brock University 18. Glendon College (York University) 19. Lakehead University 20. Laurentian University of Sudbury 21. Nipissing University 22. Queens University 23. Redeemer University College 24. Trent University 25. University of Ontario Institute of Technology 26. University of Ottawa 27. University of Western Ontario 28. University of Windsor 29. Wilfrid Laurier University 30. York University 31. Bishop's University 32. McGill University
Quebec	N/A
New Brunswick	<ol style="list-style-type: none"> 33. St. Thomas University 34. University of New Brunswick
Nova Scotia	<ol style="list-style-type: none"> 35. Acadia University 36. Cape Breton University 37. Mount Saint Vincent University 38. St Francis Xavier University
PEI	<ol style="list-style-type: none"> 39. University of Prince Edward Island
NFLD	<ol style="list-style-type: none"> 40. Memorial University of Newfoundland
Yukon	<ol style="list-style-type: none"> 41. Yukon University
NWT	<ol style="list-style-type: none"> 42. Aurora College
Nunavut	<ol style="list-style-type: none"> 43. Nunavut Artic College