ENVIRONMENTAL SCAN INDIGENOUS EDUCATIONAL PROGRAMS AND ACADEMIES

Final Report

Yukon First Nation Education Directorate Firelight Research Inc.

September 7, 2021





ACKNOWLEDGEMENT

We would like to acknowledge the time, knowledge, and teachings generously shared by all participants, and the critical role their voices hold in shaping this *Environmental Scan of Indigenous Education Programs and Academies for the Yukon First Nation Education Directorate*.

The participating organizations for this study include:

- Deh Gáh Elementary and Secondary School, Fort Providence, NWT;
- Xetólacw Community School, Lil'wat, BC;
- The Land and Language Based Learning Program, Ladysmith Secondary School, BC;
- sənsisyustən House of Learning, Westbank, BC;
- wâhkôhtowin School, The Nêhiyâwiwin Cree Language and Culture Program, Saskatoon, SK;
- Treaty Education Alliance, Fort Qu'Appelle, SK;
- Clearwater River Dene School, Clearwater River, SK;
- An environmental, Indigenous land-based education program in a public school division (anonymized);
- Listuguj Education, Training and Employment (LETE), Listuguj, QC;
- Eskasoni Immersion School (Essissoqnikewey Siawa'sik-I'nuey Kina'matinewo'kuo'm), Eskasoni, Nova Scotia;
- Salish School of Spokane, Spokane WA, USA;
- Akwesasne Freedom School, Hogansburg, New York, USA; and,
- The Association of Independent Schools of Western Australia, Osborne Park, Australia.

EXECUTIVE SUMMARY

In their efforts towards designing Indigenous academies at the secondary school level in the Yukon, the Yukon First Nation Education Directorate (YFNED) has undertaken an environmental scan to better understand existing Indigenous education programs, both domestically and internationally, and their role in supporting Indigenous students. This report summarizes the findings of the environmental scan, including existing Indigenous education programs, approaches to teaching and resulting trends and best practices in Indigenous education. Additionally, challenges and barriers, as well as recommendations for YFNED are provided. The purpose of this environmental scan is to explore the current state of Indigenous-led education approaches that positively contribute to the revitalization of Indigenous pedagogy, language, and culture, and subsequently, to the success of Indigenous students.

The schools and programs interviewed as part of this research included academies from across Canada, as well as the United States and Australia. Various factors of Indigenous education programs were reviewed including: program development, approaches to teaching, learning environments and land-based education, curricular content (including traditional knowledge and language), and measures of 'success'. Generally, this report focuses on secondary school level education, though cases of primary and middle school were included where relevant. Further, this report engages in both academic and alternative education literature, while also relying heavily on the knowledge of key informants and on-the-ground examples of Indigenous education and schools.

While the operation of the 13 academies discussed throughout the report vary greatly in aspects of programming, context and geography, common promising practices have enabled the success of these programs. These include involving community, caregivers, and Elders; centering Indigenous worldviews and relationships; using strengths-based approaches; creating safe spaces and environments for learning; creating culturally-specific curricular content; and grounding programs in culture, language, and Indigenous ways of knowing and doing.

Based on the findings from key informant interviews and the literature review, the following corresponding recommendations were developed around the establishment of Indigenous education programs. Given the importance of geographic and community-specific context in Indigenous education, high-level recommendations suggest that YFNED:

- 1. Develop Indigenous education programs to meet the needs and goals of community;
- 2. Involve Knowledge Keepers, Elders, and cultural experts in all aspects of program development and delivery;
- 3. Ground all aspects of a school or program in Indigenous culture and worldviews;
- 4. Centre Indigenous pedagogies and methods of teaching;
- 5. Create Indigenous-specific curricular content to align with Indigenous knowledges and ways of knowing and being;

- 6. Focus on language revitalization as a key means to incorporate Indigenous ways of knowing and being;
- 7. Create safe environments in and beyond the walls of the classroom;
- 8. Train, hire, and retain community-based Indigenous educators; and,
- **9.** Measure success through holistic, flexible, and context-specific assessments or understandings of 'achievement'.

The development of any Indigenous academy for Yukon First Nations should be fundamentally situated within Indigenous values and goals, implement Indigenous approaches to teaching, and deliver culturally-specific content, to be relevant and supportive for all learners.

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ACRONYMS AND ABBREVIATIONS

AISWA	Association of Independent Schools of Western Australia
CAT	Classroom Assessment Techniques
EA	Education Assistant
ECE	Early Childhood Education
FNESC	First Nation Education Steering Committee (B.C.)
FNSA	First Nations School Association (B.C.)
IEP	Individualized Education Plans
ISC	Indigenous Services Canada
LETE	Listuguj Education, Training and Employment
RTI	Response to Intervention
TEA	Treaty Education Alliance
YFNED	Yukon First Nation Education Directorate

1. INTRODUCTION

1.1 PURPOSE AND SCOPE

The Yukon First Nation Education Directorate (YFNED) has undertaken an environmental scan to better understand existing Indigenous education programs with the goal of developing Indigenous academies at the secondary school level in the Yukon. This report compiles examples of existing Indigenous education programs and approaches, trends and best practices, challenges and barriers, and recommendations for the YFNED. The purpose of this environmental scan is to explore the current state of alternative and Indigenous-led education and approaches to teaching that are paving the way for Indigenous pedagogical revitalization.

Though the YFNED is undertaking efforts towards designing Indigenous academies at the secondary school level, with a focus on grades 8 to 12, the data in this report considers the experience of all school-aged youth, given the limited number and availability of existing Indigenous academies. Key components under consideration include methods of teaching, learning environments, curriculum content, and assessments. This report primarily focuses on the Canadian context, though international examples are discussed to learn from the experience and successes of Indigenous people, communities, and organizations abroad.

This report engages in both academic and alternative education literature, while also relying heavily on the knowledge of key informants and community-based practices. These various Indigenous education models are presented in order to provide concrete examples and recommendations for the YFNED in the establishment of Indigenous programming in the Yukon context.

1.2 STUDY CONTEXT

Indigenous peoples have had their own structured and complex education systems grounded in community, culture, spirituality, and the land since time immemorial (Schugurensky 2002). These Indigenous teachings would address the total being of a child as well as the whole community, taking the community as the classroom, and expecting each adult to ensure children learn to live a good life (Rico 2013, 382). However, with colonization came the forceful employment of Western education systems as tools for genocide. The imposition of colonial education institutions devastatingly assimilated Indigenous peoples from their communities and worldviews (National Collaborating Centre for Aboriginal Health et al., 2009), and caused widespread loss of life and culture.

Notably, Indian Residential Schools were established to remove Indigenous children from their families and communities with the objective to "continue until there is not a single Indian in Canada that has not been absorbed into the body politic and there is no Indian question" (Duncan Campbell Scott 1920, head of the Department of Indian Affairs). It is crucial that Canada's colonial, assimilationist foundations in education are understood in order to contrast this with Indigenous-led, decolonized, education programs and schools discussed throughout this report. While this distinction is key, it is also important to recognize that the trauma wrought by colonial education systems may cause some people to distrust or be retraumatized by any formalized education system.

In response to this, the National Indian Brotherhood developed the "Indian Control of Indian Education" policy paper in 1972, which addresses issues of local authority, parental involvement, and culturally-based curriculum, and stated that:

[w]e want education to provide the setting in which our children can develop the fundamental attitudes and values which have an honoured place in Indian tradition and culture. (National Indian Brotherhood, 1972, 2)

The policy further attested that the federal government had a responsibility to fund Indigenous education as per commitments made in Treaties negotiations. The "Indian Control of Indian Education" document can be seen as laying the groundwork for subsequent movements by Indigenous peoples to (re)gain control over their education (Schugurensky 2002).

Since 1972, many other key documents have been developed to inform the path forward, including "First Nations Control of First Nations Education: It's our Vision, It's our Time" (AFN, 2010), "Reforming First Nations Education: From Crisis to Hope" (Standing Senate Committee on Aboriginal Peoples, 2011), and "Working Together for First Nation Students: A Proposal for a Bill on First Nation Education" (Government of Canada, 2013). Reports of the Royal Commission on Aboriginal Peoples (1996), the United Nations Declaration on the Rights of Indigenous Peoples (2007), and the Truth and Reconciliation Commission of Canada (2015) have also emphasized the right of Indigenous people to establish and control their educational systems.

This work has led to Indigenous communities and organizations taking control over education systems from coast to coast to coast. In 2021, the Yukon government agreed to form a First Nations school board, enabling the establishment of schools tailored specifically toward Indigenous students. Though schools operated by the new school board will not be exclusively for Indigenous students, the approaches taken reflect a decolonial education paradigm that is rooted deeply in community (Tukker 2021). This marks a milestone in the history of Indigenous education in the territories, as well as a window of opportunity for upholding and implementing decolonial and Indigenous-led education for Yukon First Nations students.

Given the high percentage of Indigenous students in the Yukon – where Indigenous students make up 31% of overall enrolment in Yukon schools – it is critical that the YFNED support the revitalization of Indigenous ways of knowing and being in the education system. This is particularly important as statistics indicate that Indigenous students are not performing as well as their non-Indigenous peers in mainstream education. Due to historical and ongoing colonization, Indigenous students continue to have lower rates of attendance, (standardized) assessment scores, and graduation rates than their non-Indigenous peers (Yukon Department of Education 2020; Auditor General 2019).

Thus, this environmental scan of Indigenous-led education is being released at an opportune time in the Yukon, a place where inequitable outcomes between Indigenous and non-Indigenous learners are recognized by education authorities, and a focus on truly inclusive education approaches are currently being evaluated and prioritized (Yee 2021).

1.3 ORGANIZATION OF THE REPORT

This report was prepared to support the YFNED to better understand existing Indigenous education systems and programs with the goal of developing Indigenous academies at the secondary school level in Yukon. The bulk of the report is detailed in the summary of key findings (Section 4) and the recommendations developed from these key findings (Section 5).

The report is organized as follows:

Section 1 – Introduction: provides a background to the purpose and scope of the research and a brief contextual background on Indigenous education, especially in the Yukon.

Section 2 – Methods: describes the approach to conducting the study, the data sources that form the content of this report, the approach used in the analysis of the data, as well as an explanation of limitations.

Section 3 – Defining Indigenous Education: outlines 'Indigenous education' and 'academies' within the context of this report.

Section 4 – Findings: presents the data through the use of case studies to exemplify best practices in Indigenous education. This includes information on program development (Section 4.1), content and curriculum (Section 4.2), methods of instruction and teaching (Section 4.3), environments in which students learn (Section 4.4), and evaluating success (Section 4.5). Additionally, any prevalent challenges facing Indigenous education programs are covered in Section 4.6.

Section 5 – Recommendations: details suggestions provided by interviewees and drawn from the literature for establishing Indigenous-led education for Indigenous learners in the Yukon.

Section 6 – Conclusion: summarizes the main findings and recommendations.

Additionally, readers may find useful supplemental context and information to frame the report findings in the appendices, including the interview guide (Appendix A), the consent form (Appendix B), and a list and brief description of the 13 schools and programs interviewed for this research (Appendix C).

2. METHODS

An environmental scan was conducted through a literature review of relevant documents and research, as well as key informant interviews with experienced educators who are instrumental in the delivery of Indigenous education programming.

The literature reviewed for this study drew upon various documents – including reports, studies, academic papers, and other sources – to gain a comprehensive understanding of Indigenous pedagogies and education. The literature detailed experiences of Indigenous-led education models, frameworks and programs from Canada, the United States, New Zealand and Peru, and included examples from Indigenous communities such as Inuit, Yup'ik, Anishnaabe, Dene, Mi'kmaq, Mohawk, Cherokee, Maori, and Hawaiian, to name a few. Some articles describe existing Indigenous-run schools (e.g., Huaman 2020; Bell 2013; O'Connor 2009; Papp 2020), while others focus on the philosophies of Indigenous ways of knowing, learning, and teaching (e.g., Tuck, McKenzie, and McCoy 2014; Betasamosake Simpson 2014; Cajete 2003).

Interviews for this study were conducted with staff from a range of Indigenous-based education programs who work with Indigenous and non-Indigenous students in Canada and abroad, further detailed below. Interviews took place between June 10, 2021 and July 7, 2021. They ranged from 45 minutes to 1.5 hours in length. Each interview was audio recorded and notes were recorded digitally. Participation was voluntary, and free, prior and informed consent was obtained before each interview (see Appendix C). Written consent was provided when possible, otherwise verbal consent was recorded prior to conducting the interviews.

Due to the current context of the COVID-19 pandemic, all interviews were completed remotely via telephone and videoconferencing software (i.e., Zoom). Interview questions were openended to allow for a range of responses to be shared by the participants (see Appendix A). Core topics for the interview questions were developed from the literature review, and through conversations with the YFNED team.

The findings of this report are based on a thematic analysis of what participants were able and willing to share, as well as findings from the literature review. The data collected was analyzed using standard qualitative practices of thematic coding. Interview notes were reviewed, and key themes were identified. The thematic coding process aimed to identify promising practices, key challenges and barriers, and opportunities.

2.1 PARTICIPANTS

Indigenous education and interview participants were identified in the environmental scan, and through the direction of the YFNED team. Additional organizations were identified by interview participants. While secondary schools were the focus, some primary and middle schools were included in interviews.

The findings within this report are based on the contributions from 13 different organizations interviewed for this study. These organizations are spread across eight different territorial, provincial, or state jurisdictions, which include the Northwest Territories, British Columbia, Saskatchewan, Ontario, Quebec, Nova Scotia, Washington, New York, and Western Australia.

Participating organizations in this study include:

- Deh Gáh Elementary and Secondary School, Fort Providence, NWT;
- Xetólacw Community School, Lil'wat, BC;
- The Land and Language Based Learning Program, Ladysmith Secondary School, BC;
- sənsisyustən House of Learning, Westbank, BC;
- wâhkôhtowin School, The Nêhiyâwiwin Cree Language and Culture Program, Saskatoon, SK;
- Treaty Education Alliance, Fort Qu'Appelle, SK;
- Clearwater River Dene School, Clearwater River, SK;
- An environmental, Indigenous land-based education program in a public school division (anonymized);
- Listuguj Education, Training and Employment (LETE) of the Listuguj Mi'gmaq Government, including Alaqsite'w Gitpu School, Listuguj, QC;
- Eskasoni Immersion School (Essissoqnikewey Siawa'sik-I'nuey Kina'matinewo'kuo'm), Eskasoni, Nova Scotia;
- Salish School of Spokane, Spokane WA, USA;
- Akwesasne Freedom School, Hogansburg, New York, USA; and,
- The Association of Independent Schools of Western Australia, Osborne Park, Australia.

Please refer to Appendix C for further details on each of these academies or programs.

2.2 LIMITATIONS

Given the unprecedented circumstances of the COVID-19 pandemic, it was not possible to conduct in-person interviews or hold in-person engagements for this study. In effort to prioritize and protect the health and safety of participants and communities, the project team worked within current health and safety parameters and completed this study through virtual means.

Additionally, some educators and school staff were unable to participate in interviews due to time constraints related to the end to the school year. To mitigate this, additional potential interviewees were contacted based on the suggestion and knowledge of previously interviewed participants. The findings within this study are limited to what these participants were able and willing to share.

3. **DEFINING INDIGENOUS EDUCATION**

Indigenous-led education seeks to enhance the achievements of and supports for Indigenous students, as well as increase access to Indigenous knowledge, culture, languages, and history for all students. Though Indigenous peoples all over the world have been advocating – with varying degrees of success – for the control of Indigenous education to ensure that Indigenous students actualize their right to a high quality, linguistically, and culturally appropriate education, the need to establish local models based in community needs and priorities continues to be essential.

Attempts to define Indigenous education rely on complex relations to traditions, place, and time. Furthermore, views on education depend on Indigenous educators' perceptions of their own language and culture, and of provincial (or other) education systems (Battiste 1995, ix). Some schools have redefined Indigenous education as an entire process where,

First Nations have begun to move from models of colonial domination and assimilation to those that are culturally, linguistically, and philosophically relevant and empowering. The first bold steps by a few communities have led many other First Nations communities to assume jurisdiction over their schools, although initially that control was primarily administrative. Once communities felt secure about handling the school system, they quickly realized that the outcomes of education were inconsistent with their educational hopes and desires. (Battiste 1995, x-xi)

Indigenous education therefore includes authority and self-determination over all components of education, such as curriculum development, teaching approaches, assessment, funding, and community engagement, among others. Indigenous schools, academies and education programs are established to bridge the gap between the mainstream education and Indigenous ways of knowing and being in a way which is led by Indigenous peoples, communities and organizations.

Indigenous schools, academies and education programs are used interchangeably in this report since they generally have similar goals, mandates and approaches, and because very few examples of Indigenous academies were found. As this study will support efforts towards designing Indigenous academies in the Yukon, it is important to situate Indigenous education in an 'academy' context – which can be imagined as a centre of excellence for Indigenous learning that has authority to operate and educate learners in way that they see fit. While the case studies included in this study are generally recognized as 'schools' or 'educational programs', the concept of academies can be kept at the forefront as an approach to designing any programming.

4. FINDINGS

The following section is based on analyses of both key informant interviews and the literature review. Although there are similar findings across different jurisdictions and regions, these findings are nested within unique regional contexts and circumstances of varying levels of resources, access, and networks. This section is therefore organized by common trends in Indigenous education approaches and programming, detailing the local circumstances identified by key informants where necessary.

It should be noted that there is not a singular 'best' model for an Indigenous academy, because they are by definition programs which are unique to specific communities, Nations, and learners. The following findings serve as high-level examples of what could be done in the spirit of sharing knowledge, as well as strengthening, encouraging, and recognizing existing Indigenous academies and Nations.

Thus, the following section on summarizing the report's findings are organized as follows:

- Section 4.1 Program Development;
- Section 4.2 Content and Curriculum;
- o Section 4.3 Indigenous Pedagogy and Methods of Teaching;
- Section 4.4 Learning Environments;
- Section 4.5 Evaluating and Measuring Success; and,
- Section 4.6 Barriers and Challenges

4.1 PROGRAM DEVELOPMENT

Key factors in establishing Indigenous education programs are dependent on sustainable staffing, resources, and partnerships. While the origin of any Indigenous education program varies greatly depending on the history and context, these are three high-level, impactful, administrative factors to consider in regard to establishing sustainable and successful programs.

4.1.1 Staffing and Human Resources

Hiring local teachers, particularly Indigenous teachers who are fluent in local First Nations languages, was stressed as a key consideration in the development and implementation of education programs. This can be challenging, especially for remote communities, where road access is limited, or the population is small. To address this gap, schools have established their own community-based teacher training programs or in-house training; partnered with local universities; and hired former students, parents and community members, when possible. Ultimately, circular sustainability is desired, where community members receive training and mentorship to become educators in their community's school, and thus can remain in, and work in, their home communities.

Clearwater River Dene First Nation in northern Saskatchewan has recently designed a fouryear Bachelor's of Education Program that takes place in community. The Dene Teacher Education Program is a collaboration between the Northern Lights School Division, Meadow Lake Tribal Council, First Nations University of Canada, and University of Regina. The goal for Clearwater is to become self-sustaining in education for their Nation. Teachers who have graduated from this program move on to teach Dene curriculum, in the Dene language, to Dene students (Clearwater River Dene School, June 29, 2021). This circular model is unique and cited as a source of success for the operation of their school.

Similarly, the Nêhiyâwiwin Cree Language and Culture Program at wâhkôhtowin School in Saskatoon have partnerships with the University of Saskatchewan's Indigenous Education Program. The university integrates teacher training theory courses to happen at wâhkôhtowin School, and teachers also do practicums at the school. In terms of Cree-language support, the Nêhiyâwiwin Cree Language and Culture Program provides peer-to-peer support between fluent and non-fluent teachers (June 22, 2021). This program has proven hugely beneficial to hiring Cree teachers. In other cases, community-based, culturally relevant training for educators is offered where accredited education programs have not been established. The Salish School of Spokane have hired almost 100% of its employees from community. While six of their teachers have education degrees, most others receive community-based training, and then go to college for associate teacher degrees (Salish School of Spokane, July 7, 2021).

Xetólacw Community School (BC) similarly has a diverse team of staff, and is working with the First Nation Education Steering Committee (FNESC) to upgrade the qualification of their Indigenous staff. All of the school's Education Assistants (EAs) are community members. To overcome the prevalent stigma that they are not officially 'teachers', FNESC is currently developing a program which will grant EAs a certificate where they can teach in First Nations schools in FNESC jurisdiction (Xetólacw Community School, June 17, 2021). Other schools spoke about the benefits of hiring community members. At the Salish School of Spokane, one third of staff are parents of children, which cements family involvement in the school, and supports the local Nation through training and hiring in their own community (Salish School of Spokane, July 7, 2021). Similarly, the Akwesasne Freedom School underscored the importance of having graduating students come back to teach (Akwesasne Freedom School, June 16, 2021).

Such initiatives, which support the hiring and retention of Indigenous educators, are integral to the development and implementation of successful and sustainable Indigenous educational programs. It is equally important to provide ongoing opportunities for professional development and capacity building for staff. Continuing education opportunities for educators can improve teachers' skills and, in turn, boost student outcomes. This includes key skills specific to the context of Indigenous education, such as language and cultural safety. At sensisyusten House of Learning, all teachers participate in language classes, with the goal of using nsyilxcen in the classroom and increasing students' language skills (sensisyusten House of Learning, June 1, 2021). The Land and Language Based Learning program located in Ladysmith, BC provides learning opportunities to their staff to develop cultural awareness and sensitivity to students' cultural background (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021).

4.1.2 Relationships, Collaboration and Partnerships

The relationship Indigenous schools have with the broader community, or at the provincial or national level, helps to shape the skills of their staff and the content of their programming. In particular, partnerships with bands, tribal councils, education authorities, post-secondary institutions, and various external organizations (e.g. non-profits) can shape the development and delivery of high-quality Indigenous education programming.

Relationships with education authorities, tribal councils, and band offices are integral for community engagement, program development, professional guidance, and financial support. For example, Xetólacw Community School draws support from Lil'wat First Nation, where the director of the school meets regularly with other departments in the Nation. The Nation's land department, for instance, will provide information about the territory and share land-based teachings for teachers and students to draw on this expertise (June 17, 2021). Further, partnerships with Indigenous organizations, such as the First Nations Education Steering Committee (FNESC) and the First Nations Schools Association (FNSA), have also been essential to the success of some schools and programs.

Multiple schools have established relationships with local universities, particularly for teacher training programs, as mentioned previously. Partnerships with post-secondary institutions can also assist schools and programs with program development. For example, Listuguj Education, Training and Employment (LETE) established a partnership with McGill University to deliver an in-community post-secondary program, working together with a Mi'gmaw Advisory body. This process, where relationships and consensus-decision making were central, included participation and engagement in decision-making regarding the vetting of instructors and course syllabi, and eventually resulted in the creation of "Indigenizing Guidelines" (LETE, June 30, 2021). Other schools work with various educational consultants (e.g., archivists, professors, linguists) who are knowledgeable about the local community context in order to develop curriculum (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021; Xetólacw Community School, June 17, 2021). Various other types of partnerships can support the development and delivery of programs, like the Nature Conservancy of Canada and Outward Bound Canada, for example. Another

the Nature Conservancy of Canada and Outward Bound Canada, for example. Another example is the partnership between the Clearwater River Dene School and an international environmental climate change study where students will be working with scientists to do water monitoring and other land-management practices. This project will be incorporated into science classes for middle and high school students. One participant noted that this partnership may create future employment opportunities for students, given their Nation's proximity to the Athabasca tar sands and subsequent need for environmental monitoring:

> We're downwind of Fort McMurray, so we're always wondering, cognizant of what sorts of things are blowing into our air and into our water from that community. So, it's going to be pretty cool that our kids will have access to these scientists. They're going to become the stewards of their traditional lands. There's a lot of uranium exploration going on right now.... and I think that if we have our own students trained to be those environmental watchdogs, to do the water testing, to do the soil testing, to do the tree coring, I think that would be, it's good income, it's a good job, it's a good opportunity, it's rewarding. But it's also absolutely critical to all exploration that's happening in traditional areas throughout the country. (Clearwater River Dene School, June 29, 2021)

Partnerships are key. However, one interviewee explained that while we often seek out, and use the language of 'partnerships', these are largely inadequate. As they explained:

...remember, those [formal partnerships] are all colonial, and that's not what we do. And we've tried it in the past, but they always fail. Because the people come and go in their jobs, and then they don't know. They can't be in relationships because the systems don't let them. (Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021)

Thus, being in *relationship* – rather than a formal partnership – is the Indigenous way, where the focus is on establishing and nurturing constructive long-term relationships based on mutual respect, trust, collaboration, and accountability. From an Indigenous approach, 'partnerships' are singular and fragmented, whereas genuine and reciprocal relationships are an integral part of the education system.

4.1.3 Funding and Sustainability

Chronic underfunding of Indigenous schools and programs has affected the development and delivery of programs, as well as costs related to other educational components (i.e., technology, libraries, sports). As a result, schools and programs have sought out various funding models, including private schools which are tuition-based (i.e., Salish School of Spokane), autonomous schools funded by a multitude of funding streams including grants and donations (i.e., Akwesasne Freedom School), federally-funded band schools (i.e., Xeťólacw Community School), boarding schools (such as those affiliated with the Association of Independent Schools of Western Australia), or provincially-funded public schools (i.e., wâhkôhtowin School).

The unique position of each school or program greatly affects the availability and accessibility of funding. There is a significant difference in financial resources available to different communities, and

[...] considerably less funding per student at a federally-funded institution – that is, on-reserve schools that are covered by a so-called treaty...in 2015 funding per student at provincial schools was nearly twice that of federally funded places. On the positive side, First Nation's schools can operate more freely with support from their school division and their local school board. (Jung, Klein, and Stoll 2018, 53)

Even if funding to Indigenous schools is on par with other provincially-funded schools, this does not recognize systemic barriers or historical discrepancies in funding (Treaty Education Alliance, June 15, 2021). Additional funding is also needed and sought after for specific programs or activities, such as land-based activities, which often operate at a higher cost than standard classes (Deh Gáh Elementary and Secondary School, June 24, 2021). Thus, funding is a key consideration in the establishment of programs as it can influence the framework, capacity, and the day-to-day functioning of programs. Securing adequate, flexible and sustainable funding is therefore crucial to the vitality of schools and/or programs.

Nonetheless, schools such as Xetólacw Community School have been able to use federal funding in ways which meet their needs due to good communication with their local band. Further, senior school staff are involved in budget planning and given authority to manage

financial decisions, which has been extremely positive in the administration of the school (Xetólacw Community School, June 17, 2021).

In contrast, the Akwesasne Freedom School was established in political resistance to colonial structures, and faces unique jurisdictional challenges as the community straddles the US-Canada border in the state of New York, and the provincial border between Quebec and Ontario. The Mohawk Nation Council of Chiefs (their traditional council) governs the school without direct federal, state, or provincial funding, despite accepting all Mohawk students regardless of their place of residence. In such instances of radical self-determination and autonomy, diverse funding streams are heavily relied upon to run education programs including fundraising activities like auctions and concerts, individual donations, book sales, tribal council contributions, and so on (Akwesasne Freedom School, June 16, 2021).

Lastly, funding models for Indigenous education programs internationally mirror some aspects in Canada. The Association of Independent Schools of Western Australia (AISWA) schools receive funding based on the number of students, location of the school, literacy and numeracy ability of schools. Additionally, some Aboriginal¹ communities receive 'land money', such as or mining royalties, which they might utilize in their education system (Association of Independent Schools of Western Australia, June 28, 2021). Some Indigenous communities in Canada similarly use money from natural resource projects and land claim settlements towards educational needs (i.e., sənsisyustən House of Learning).

4.2 CONTENT AND CURRICULUM

Having a culturally-relevant and appropriate curriculum which supports the development of a positive self-identity through learning Indigenous histories, cultures, traditional values and knowledge is key to the success of Indigenous students. There are primarily two approaches to developing such curricula: processes where standard curriculum is modified or integrated in Indigenous educational programs, or processes where curriculum is independently developed.

Some of the schools included in this study, including Xetólacw Community School, sensisyusten House of Learning, and TEA First Nations schools, employ provincial curriculum but pursue different methods to centre culture or Indigenous knowledge where possible. For example, sensisyusten House of Learning is registered as an independent private school and is open to both Indigenous and non-Indigenous students. As a private school, sensisyusten follows provincial curriculum, but they include nsyilxcen language lessons and incorporate Okanagan culture into programming wherever possible (sensisyusten House of Learning, June 1, 2021). However, 'Indigenizing' provincial curriculum and learning outcomes can be challenging, and inadequate in meeting the needs of Indigenous learners. TEA-affiliated schools also follow provincial curriculum, but concurrently run a Nation-builders program, to promote Nation-building, cultural revitalization and Indigenous resurgence among students, to circumvent the challenges of 'Indigenizing' mainstream curriculum (Treaty Education Alliance, June 15, 2021).

I think a lot of things we try and do too, is try and make things fit where they don't fit... Our schools have lots of opportunity to experience their culture. Like if they're

¹ The term 'Aboriginal' is used in this report in the context of Australia, as this is the preferred term used by Indigenous people of mainland Australia.

having a cultural day, or whatever is happening within the community... So instead of Indigenizing ... instead of trying to pull out random tokenizing outcomes, what method they're trying to do is like 'mathematizing' their traditional ways already, instead of Indigenizing the curriculum. Like flipping it over, if that makes sense. Mathematizing something they are already going to do. (June 15, 2021)

Numerous interviewees highlighted a fundamental epistemological difference between including aspects of culture – or Indigenizing curriculum – versus grounding curriculum in Indigenous cultures, knowledges and worldviews. One approach is to 'add-on' culture as a weekly class, section in a lesson, or textbook chapter. In this case, culture is appended to existing provincial, or school learning outcomes. Conversely, the preferred approach of many schools is one where the entire curriculum *is* culture, and learning outcomes are discovered within those existing cultural activities. One Elder interviewed for this study referred to this as 'flipping the question' about education programs, where cultural content is not being brought *into* the curriculum, but rather culture *is* the curriculum (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021).

The Land and Language Based Learning Program is designed on an Indigenous model of 'Knowing, Doing, Being, Becoming', based on Coast Salish teachings, knowledges, and approaches. There are no set lesson plans – as that is not the Coast Salish way of doing. Rather, the program is based on Elders' and community teachings (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021). The program is flexible and adaptive because it is 'alive' – it is organically responsive to relationships, needs, curiosities, and priorities, and requires students to listen with the head, heart, and mind (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021). Similarly, the Akwesasne Freedom School was established by clan leaders and Elders, and local grassroots educators independently developed the school's curriculum. The curriculum follows the 15 elements of the Thanksgiving address and is steeped in cultural activities and traditional knowledge (Akwesasne Freedom School, June 16, 2021).

Regardless of the approach taken to creating culturally-appropriate and relevant curriculum, the involvement of community in creating curricula is imperative, according to interviewees. The Eskasoni Immersion School, for instance, invited Elders to help develop their modified curriculum. They adapted the English curriculum and used Mik'maq knowledge to meet the required outcomes (Eskasoni Immersion School, July 5, 2021). Others also echoed the importance of community engagement in curriculum development:

I think community engagement, community involvement is important. So, are they involved in all steps of it, too right? Like, the development through to the implementation and the follow-up work, they need to have a role in making sure all of the voices are heard. There's a lot of different voices in each of our Nations too... that have different stories and different knowledge that needs to be brought to the table. (Treaty Education Alliance, June 15, 2021)

This will ensure that the curriculum content is specific to the local context and the distinct knowledge systems of the community. There is much diversity among Indigenous Peoples, and therefore among Indigenous ways of knowing, teaching, or learning, yet there are also some notable commonalities which may be reflected in Indigenous curricula, some of which are further described below.

4.2.1 Traditions and Culture

Fundamentally, a culture-based curriculum

is grounded in what students are familiar with; actualities rather than abstractions. It emerges from the particular characteristics of place. It draws from the unique characteristics and strengths of the community and, thus, does not lend itself to duplication or replication. It promotes the use of community resource people and is inherently experiential drawing upon the opportunities provided by the local context and its people. (Lewthwaite, 2007, 5 as in Rico 2013, 388)

Traditional and cultural activities, programs and initiatives are integrated into Indigenous curricula in very locally-specific ways. For example, the sensisyusten House of Learning takes a collaborative planning approach to cultural content development with the assistance of Knowledge Keepers. Crucially, sensisyusten employs language and culture staff at their school to guide the integration of Okanagan culture into the curriculum in order to bring information into curriculum in a sensitive, respectful way that follows protocol (sensisyusten House of Learning, June 1, 2021). Similarly, the wâhkôhtowin School heavily leans on their Cultural Resource Teacher to assist other teachers in integrating culture throughout classes (The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021).

There are many frameworks, ideas, and tools for schools to integrate culture throughout classes, but again, these must be adapted to the local community. One example specific to Coast Salish Nations is the integration of weaving designs as part of teaching mathematics (e.g., geometry). In this case, the math class itself is the activity of weaving (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021). Other examples include using the medicine wheel model in health science class, and learning traditional art practices (i.e., carving) in arts class.

Traditional and cultural teachings were also heavily integrated in the curricula of schools interviewed, since

[c]ulture is very academic - it burns my ears when I hear people kinda making it sound like they're two different things, cause really, it's not. (Xetólacw Community School, June 17, 2021).

As discussed in Section 4.4.3, multiple schools invite Knowledge Keepers into classrooms to share a variety of teachings. Often, these are traditional teachings, or cultural knowledge, such as hide tanning, hunting and trapping, or traditional dancing, among many others. Additionally, some school interviewed explained how they strive to teach Indigenous histories and stories. As explained by one interviewee, schools should be educating students to be aware of these histories to ensure they are passed on from one generation to the next (Xetólacw Community School, June 17, 2021).

4.2.2 Connectedness and Relationships

Relationships are integral to Indigenous ways of life. Indigenous worldviews are grounded in principles of interconnectedness and relationality, where all living and non-living beings are interrelated and interdependent. Such concepts are integral to Indigenous curricula, to support

students in (re)connecting to their identity, community and culture, and to give a sense of belonging and understanding of how their lives and those of their families and communities are part of creation and a rich history. This also supports students in developing an that their life has meaning and that they have a unique and specific purpose in life connected to the world around them.

When developing curricula, these concepts can be applied by creating learning opportunities that emphasize learning in relationships with fellow students, teachers, families, members of the community, and the local lands. In fact, Indigenous knowledges particularly emphasize the importance of creating and sustaining relationships with the place where we live-the land, rivers, forest, oceans, water, and rocks. Every place has its own set of seasonal events that nature unfolds every year, and framing lessons according to the seasons and the cycles of life is one of the easiest and most effective teaching tools to help students have a relationship with the land. For example, the Deh Gáh Elementary and Secondary School centres seasonality within school terms, and also ties learning to specific landmarks based on those seasons (e.g., river, or sky) (June 24, 2021). Though unaffiliated to their organization, AISWA shared the example of an Australian Aboriginal school, Gunbalanya School, which developed curriculum based seasonally on the wet and dry seasons. Not only does the school include teachings around the changing of seasons within the curriculum content, but the school also bases their term dates on climatic seasons, since the Gunbalanya School is only accessible in the dry season with four-wheel drive (Association of Independent Schools of Western Australia, June 28, 2021).

4.2.3 Sacredness and Spirituality

From an Indigenous perspective, the world exists in one reality composed of an inseparable weave of secular and sacred dimensions. Therefore, spirituality is a necessary component of learning, and many schools interviewed described the inclusion of ceremony and spiritual practices as part of their curriculum. For example, the Salish School of Spokane facilitates coming of age ceremonies, where youth participate in specific cultural training, a series of ceremonies, and other related activities (Salish School of Spokane, July 7, 2021). Similarly, Deh Gáh Elementary and Secondary School held rights of passage camps for male and female students where each group completed culturally and gender-specific activities on the land (Deh Gáh Elementary and Secondary School, June 24, 2021). Another environmental land-based program has sweat lodges on site, and high school students are encouraged to participate in ceremonies if they feel comfortable (Anonymous, July 7, 2021).

The Nêhiyâwiwin Cree Language and Culture Program opens the school year with a traditional ceremony, and they host regular cultural events at the school, as explained below:

One of the things that we always do here as well, is that we always open up the school year with a pipe ceremony and a traditional feast.... We also, in the last four years now, we've hosted a traditional round dance as well, and so that draws in many community members to our school... so again, we're always hosting things at the school here in regard to culture, so either it be a song and dance night, feast night. (The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021)

Moreover, one Anishinaabe school found that when students took these spiritual teachings home, students also began to model more positive behaviours towards dealing with stress, anger, and anxiety (Bell 2013).

4.2.4 Language

Language imparts Indigenous identity and worldviews, and holds knowledge, stories, songs, laws, protocols, histories, and so much more. In fact, Robert Leavitt's "Language and Cultural Content in Native Education" describes a fundamental difference in worldviews between Indigenous and English languages, which has implications for pedagogy:

central to the exploration of language is the awareness that Aboriginal languages reflect Aboriginal ways of knowing, ways of interacting, and ways of using language. (Battiste 1995 xvii)

Thus, language is a key vessel through which Indigenous worldviews can be brought into education programs. All schools and programs interviewed for this study included language learning in some capacity, either via immersion programs, language classes, or at the very least, inclusion of Indigenous words and phrases in program delivery. There are different degrees of incorporating language among programs, though all academies interviewed (save one) desire to incorporate language to a greater degree for their students, whether to preserve and revitalize language, or to further integrate Indigenous culture. One interviewee from the Salish School of Spokane explains,

What could possibly be more cultural than spending the whole day speaking the [nsyilxčn]? Right? The very structure and nature of the language is a massive cultural expression. (July 7, 2021)

While some schools may only have the capacity to do language classes, interviewees generally felt that language learning should be a continuum throughout schooling (i.e., present in all subject areas). The goal of the sənsisyustən House of Learning is to have 250 minutes of language per day, representing as shift from teaching language in language classes, to threading language and culture throughout all classes.

During our language and culture classes...what we're attempting to move to is moving from sort of siloed approach where sort of you're going to language and culture classes, you're going to do language and culture, and then when you come out you're going to do Western-type education, while reasonably effective, the concept of the school is to blend the two together...one of our biggest ones right now is to try and integrate more of our language and culture into our subject areas...so we take not only the concepts and write about them in English, but we also have the opportunity to be able to speak about them in our Okanagan classes. (sənsisyustən House of Learning, June 1, 2021)

One best practice is employing partial immersion programs in earlier grades (i.e., elementary school), complemented by Indigenous language classes in later grades (i.e., high school). These models fully immerse young learners to build a strong foundation in the language, and then typically transition to teaching Indigenous language as a stand-alone class, once students

have built a language foundation. This blended approach helps to maintain fluency without having to establish a comprehensive immersion program.

For example, the Eskasoni Immersion School first started as a pilot program up from kindergarten to grade three. They have expanded the program due to high demand, and are now a full immersion school until grade four. After grade four, immersion students take Mik'maq language as core classes, though there is a desire to increase this for upper years, given the success of the immersion program. The school explained that children who are Mik'maq-first speakers have an easier time adapting to both English and Mik'maq in school (Eskasoni Immersion School, July 5, 2021).

The results based on formal language tests revealed that students in the immersion program not only had stronger Mi'kmaq language skills compared to students in the second language program, but students within both programs ultimately had the same level of English. (Simon, n.d., 4)

Moreover,

Qualitative research showed additional effects of the Immersion School are minimal discipline problems, improved self-esteem and pride in being Mi'kmaw, increased academic success, and a desire on the part of the students to use the Mi'kmaw language outside of the school environment by repeating learned conversations in social situations. (Simon, n.d., 4)

Language is a strength that schools should build on and continue to support. Instituting full immersion programs was considered a best practice in doing so. Language retention is a long process, which requires consistency as well as engagement. Vocabulary retention is only one piece of the puzzle when learning a second language – another piece is ensuring learners have confidence when speaking in the language. Immersion is considered best for retention because learners are forced to rely on their skills to communicate with others, enabling them to practice regularly and gain confidence. Therefore, being in an immersion program where language is widely spoken and well-integrated into the school supports better language retention overall. The Akwesasne Freedom School has been operating as a full Mohawk immersion school since 1985, teaching pre-kindergarten to grade 8, and added a 'language nest' for toddlers ages one to four, in a home-like setting, in 2014. This has resulted in an increase in fluent language speakers in the community (Akwesasne Freedom School, June 16, 2021).

Overall, interviewees explained that success in incorporating language learning, content, and supporting linguistic and cultural revival must come from practices including: incorporating language throughout the school setting and curricular content, learning language from an early age, and integrating language learning at home (see Section 4.4.3). This not only supports the actual acquisition of a language, but also fosters a connection to identity and a sense of self (Reyhner 2010). In the words of one interviewee,

I remember one Elder specifically talking about that, that our students are not fluent in the language, but they're fluent knowing who they are. And that's huge for our students. (The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021)

4.3 INDIGENOUS PEDAGOGIES AND METHODS OF TEACHING

Multiple interviewees stressed that while the content of what they teach matters, the methods of instruction and how Indigenous students are taught is of the utmost importance. According to Wilson (2008), the process of how one teaches is as important as the content one teaches:

It is very key, how do we educate our youth?... if we're going to educate Aboriginal people through hierarchical process, what you're basically teaching them is hierarchical process. Therefore the process is the product. If you teach or do research within the traditions of the circle, which is inclusive, participatory, proactive, that sort of thing - very general terms on this – then you're teaching individuals to become participatory, inclusive, and so forth...so we have to take a look at what are some of these basic structures and how do we apply them back into our educational process? (Wilson 2008, 103-104).

Being mindful of the way knowledge is taught can help students achieve deeper learning. The *way* knowledge is taught, or Indigenous pedagogy, is defined as an approach to teaching which focuses on students' physical, socio-emotional, intellectual, and spiritual needs.

Indigenous scholars have described traditional Indigenous pedagogy as wholistic, relational, experiential, community focused, ritual-centered, ceremonial, spiritual, and interdependent (Cajete, 1994; Castellano, 2016; Couture, 2011). Such culturally responsive approaches are most appropriate by taking in information, with the intent to understand it, relate it to what you already know, and store it in a way so you can easily retrieve it. (Papp 2020, 27).

Indigenous pedagogy that embraces Indigenous ways of knowing are fostered by approaches to teaching and learning that move beyond rule-based learning (Sumida Huaman 2020). Instead, Indigenous pedagogy encourages students to move beyond simple forms of thinking, like memorization, to complex learning processes like analysis, evaluation, and creation. This can be achieved through many means, such as storytelling for example. Traditionally, storytelling was used to teach about cultural beliefs, values, customs, rituals, history, practices, relationships, and ways of life (Peter and Hirata-Edds 2006). Storytelling still holds value as it has become a powerful and interactive instructional tool, where learning is meaningful and transformative.

There are many methods of teaching which typically occur within Indigenous pedagogical approaches. The Deh Gáh School uses the Dene Kede Curriculum by applying methods of teaching which are holistic, relational, and experiential. For example, Deh Gáh uses "spiral learning", where a subject is encountered multiple times, and expanded on each time. Deh Gáh teachers use these methods as entry points for lesson plans, emphasizing the *way* they teach, ensuring to link these methods to the ways their unique Dene students acquire knowledge (Deh Gáh Elementary and Secondary School, June 24, 2021). As part of this study, schools identified other pedagogical approaches, including relationship-centered, strengths-based, experiential-based, and inquiry-based methods of teaching, as further described below.

4.3.1 Relationships-Building through Teaching

Relationships are the heart of Indigenous cultures, and subsequently, Indigenous pedagogies. As explained by one interviewee, it all comes back to relationships: a successful education program requires positive relationship building with the student, family, and community to be successful (Association of Independent Schools of Western Australia, June 28, 2021). The interactions that take place between students and teachers, and among students, are more central to student success than any method of teaching literacy, or science, or math (Bang et al. 2014). Powerful and positive relationships established between teachers and students can draw students into the process of learning, promote their desire to learn, support adjustment to school, contribute to their social skills, promote academic performance and foster students' resiliency in academic performance (Whitlow et al. 2019). Thus, improving students' relationships with teachers has important, positive, and long-lasting implications for both students' academic and social development.

Consequently, teaching methods which enable relationship building are key to the success of many schools interviewed. At the Nêhiyâwiwin Cree Language and Culture Program, the word "wâhkôhtowin", from the wâhkôhtowin School which houses the program, means "relations" or "kinship", and that is the foundation upon which the school is built (The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021). Another interviewee stated that,

We are very committed to a humane loving set of relationship and empowerment that has a foundation in Salish language and culture. (Salish School of Spokane, July 7, 2021)

This commitment is important because when relationships are strong, it is easier to identify when a student needs help (LETE, June 30, 2021). For this reason, LETE is moving from a teacher or learner-centred approach, to an "educator *relationship with* learners" approach. In an educator-learner paradigm, the hyphen signifies the relationship between the two, necessary for authentic learning. This paradigm also recognizes and places value on lifelong approaches where educators are learners too (LETE, June 30, 2021).

At Deh Gáh Elementary and Secondary School, the approach to teaching also centres around teachers' close relationships with learners. These relationships are built through what they call a "ten-and-two" initiative: For ten days in a row, teachers check-in with one student for two minutes, creating trust and safety between the educator and learner. (Deh Gáh Elementary and Secondary School, June 24, 2021). Strong teacher relationships are also central to the Akwesasne Freedom School. At the beginning of each school year, the school hosts a ceremony where the student and their caregivers are brought forward to meet the teacher and form an agreement, setting the foundation for positive relationship building between teachers, students and families. Due to the small of the size of the school and student-teacher ratios, learners form close relationships with their teacher and peers over many years (Akwesasne Freedom School, June 16, 2021).

Overall, Indigenous pedagogy and methods of teaching which are grounded in relationships, student-centred needs, and family and community engagement, are best practices not only for Indigenous learners, but for the field of education itself. As one interviewee explained:

...probably what you could draw out of the research and evidence base here in Australia, is that good practice in teaching First Nations young people, is actually really good practice in education in general. Like, the learning outcomes are sensational, you know. And it's always centred about a relational student-centred approach, working hard and closely with family. So, those three factors really do create a really lovely teaching and learning bond between schools and community and family. (Association of Independent Schools of Western Australia, June 28, 2021).

4.3.2 Student-Centered and Strengths-Based Instruction

Student-centered and strengths-based teaching promotes approaches to teaching that build on the needs, abilities, interests, and learning styles of the students as well as their strengths and skills. In fact, strengths-based learning is an important best practice which recognizes that every student has a gift (Tagalik 2010). This is important to help students in their endeavours, as explained by one interviewee below:

The last two years, we have been focused on a theme of strength-based learning, and strength-based teaching, so everybody has a gift. So strengthening your own gifts to be a better teacher, strengthening your student's gifts, so they're [a] better Nation builder, helping everyone to recognize what their gifts are, to use them as they move forward. (Treaty Education Alliance, June 15, 2021)

Multiple interviewees stated that a central goal of Indigenous education programs should be to help everyone recognize what their gifts are and bring them forward (Treaty Education Alliance, June 15, 2021; LETE, June 30, 2021). As described by one interview, recognizing strengths rather than deficits is key. Some educators worry that students cannot learn because of trauma they may be experiencing. While trauma can be a significant barrier to learning, Xetólacw recognize that their Indigenous learners are very resilient:

The people are very resilient...if they could not learn while trauma is going on around them, they wouldn't even be here right now. There's a thing called resiliency and we want our kids, we want our teachers, to expect high standards from our students, no matter what might be going on at home...we get five hours with them, and we're totally responsible to teach these students to the best of their capacity. (Xetólacw Community School, June 17, 2021)

Taking a strength-based approach recognizes the resilience and strengths of students, and enhances the positive development of students. Taking a student-centered approach also ensures that the individual needs of students are taken into account, and teaching methods are targeted to the individual learning methods and capacities of students (Archibald et al. 2009). The Salish School of Spokane has a five-to-one student-to-teacher ratio to ensure that staff are able to adequately support individual students and be responsive to their needs and capacities (Salish School of Spokane, July 7, 2021). Another interviewee explained that to engage students, teachers tailor and differentiate lesson plans to meet the students wherever they are at.

One of the things that teachers, an expectation on teachers, is that they're differentiating their work. The lesson plans have to be differentiated to meet the kids

where they're at, to meet them at their level. And that's when we talk about entry point. What entry point can you bring that child in? (Deh Gáh Elementary and Secondary School, June 24, 2021)

4.3.3 Experiential Learning

Indigenous pedagogies are experiential in that students learn by doing. If a teacher wants to increase student engagement, then the teacher must increase student activity by asking the students to do something with the knowledge and skills they have learned. Generally, mainstream education uses a passive and acquiescent model in which students absorb information and knowledge through non-participatory means, limiting the development of the critical consciousness of the students. Instead, experiential learning promotes and nurtures critical thinking through action, experience, and activity (O'Connor 2009).

Experiential learning includes land-based and place-based learning, which encourages critical thought through interaction with the land, an understanding of nature and its relation to Indigenous knowledges – all the while connecting with and celebrating Indigenous cultures (Corntassel & Hardbarger 2019; Betasamosake Simpson 2014). Land-based learning as a pedagogical approach also has mental health benefits for learners, boosts student engagement, and builds community connectedness. Many schools interviewed for this study spoke to the success of their land-based programs and initiatives. For example, at Eskasoni Immersion School, students go hunting, fishing, and medicine picking, and Elders are present to teach the students about these traditional plants and their surrounding environments (Eskasoni Immersion School, July 5, 2021).

Similarly, students at sensisyusten House of Learning go on outings to harvest traditional plants, which is integrated in science class with the help of the school's language and culture staff. When picking bitter root, for example, students follow the traditional approach to harvesting this plant by putting the 'heart' back into the ground as a gesture of gratitude, as explained by the Elder. These outings are supplemented with stories and traditional teachings (sensisyusten House of Learning, June 1, 2021). Land-based education is also central to the Salish School of Spokane, as described in detail below:

We follow our seasonal rounds. So all of our students and our teachers and our language training program, we begin in the spring with the first foods [sweux, sweya, swinswinu'um], starts out with glacier lilies, spring beauties and chocolate tips. Then we dig [salusom, swxeta, etwa], then we dig bitterroot and biscuit root and camas. This month they just finished up gathering [hosum na tsiat], which is foam berries and sarvis berries, or June berries. Now we're entering huckle berry month. So our staff and students will be in the mountains gathering huckleberries, preserving them. August will be [tchoktau tochtan]. So in August it's choke cherries, for gathering and preservation of choke cherries. And that's when we gather [thules] for mat making. And then in the fall we tan hides and dry meat. And then wintertime is, of course, the time of stories. (July 7, 2021)

4.3.4 Inquiry-Based Learning

Inquiry-based learning can be defined as,

an approach to teaching and learning that places students' questions, ideas and observations at the centre of the learning experience. Educators play an active role throughout the process by establishing a culture where ideas are respectfully challenged, tested, redefined and viewed as improvable, moving children from a position of wondering to a position of enacted understanding and further questioning (Scardamalia, 2002). Underlying this approach is the idea that both educators and students share responsibility for learning. (Student Achievement Division, Ontario 2013, 2)

This is an approach to teaching which aligns well with traditional forms of knowledge transmission, where Knowledge Keepers and Elders will provide opportunities for learning by asking open-ended questions and encouraging learners to arrive at an understanding of concepts by themselves, or devise creative solutions on their own, with minimal intervention or instruction (Calderon 2014). This approach promotes student learning through guided and independent investigation of complex questions and problems. Essentially, this puts the learner in charge of learning.

We have been really pushing the inquiry-based model and project-based learning. That's what we are encouraging. Obviously, land based, place-based learning is a big push for us right now too... The Confident Learners Pathway is really based on grouping kids ... based on their abilities to help them move forward. (Treaty Education Alliance, June 15, 2021)

Inquiry-based learning also ensures that students are engaged in learning, since the teacher is responsive to learners' curiosities and interests. Teaching students in a way that taps into their passions and interests encourages engagement and attendance at school Pease-Alvarez & Schecter 2005). There will always be topics that interest different students, but stimulating the curiosity of students and maximizing their sense of control over the content of the classroom will promote student participation and engagement.

4.4 LEARNING ENVIRONMENTS

Indigenous pedagogies often point to the important socially situated context of learning within place (Betasamosake Simpson, 2014). Situated learning means that learning occurs directly in the place, and context, in which those teachings can be applied. Often, this can take the form of land-based learning activities and programs. As Simpson explains, for Indigenous peoples the land forms both the context (i.e., the place) and the process (i.e., the what) of learning (2014). Thus, some interviewees shared that they foster learning not only in school buildings, but also across various locations throughout a territory or community. Additionally, interviewees also shared examples of how they construct culturally-safe learning spaces, or create supportive environments in their schools, through community and family involvement.

4.4.1 Land-based Learning

From an Indigenous perspective, the land is a source of knowledge and learning. Given the history of colonialism and the violent dispossession of land from Indigenous peoples, decolonial education frameworks must reconnect Indigenous peoples to land and the relations, knowledges and languages that arise from the land (Betasamosake Simpson 2014). As

expressed by many interviewees, Indigenous education must reinsert youth into relationships with and on the land, as a way to reconnect to Indigenous cosmologies and epistemologies.

When discussing the importance of being out on the land, one interviewee with the Association of Independent Schools of Western Australia shared that:

the perspectives for our First Nations Peoples, is they're part of the country². They belong to country...Country guides them in their ways of the world, space, place, identity, and things like that...Independent school[s], community schools do a lot of on country learning, a lot of language learning, the stories that are associated with certain parts of country, and not said in other parts of country. I always remember a close friend... I remember about going out in country, and it's like, far out, 'How do you not get lost?!' He says, '[personal name], I never get lost. I've got a GPS of songs in my head. I know the song for that hill, I know the song for that valley, I know the song for this track, and I know the song for that tree. So I know exactly where I am in every single moment of the time'. (Association of Independent Schools of Western Australia, June 28, 2021)

Indigenous schools and programs have acknowledged that being on the land is crucial for the transmission of Indigenous knowledges and are undertaking efforts to ensure access to landbased learning (Corntassel and Hardbarger 2019). At Deh Gáh Elementary and Secondary School, for example, students attend land-based camps, where they do activities like collecting traditional herbs and plants to make medicinal teas (Deh Gáh Elementary and Secondary School, June 24, 2021). Another school has created spaces on campus to access and harvest medicinal plants for use in feasts or ceremonies (The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021). Clearwater River Dene School holds three different on-the-land camps for high school students, based on seasonal rotations (June 29, 2021). Finally, at sensisyusten, students travel with knowledge-keepers to participate in Sylix bitteroot picking. They underscored that the process of engaging learners and being on the land is more important than the actual outcome (sensisyusten House of Learning, June 1, 2021).

Land-based pedagogy is a catalyst for (re)connecting Indigenous peoples to the land, culture and knowledges; however, land-based learning is also an opportunity to combine cultural teachings with environmental and science learning outcomes. For example, TEA takes the content from biology, environmental science, and wildlife management classes and integrates learning outcomes into a Learning the Land program (Treaty Education Alliance, June 15, 2021). Another environmental land-based program has four varying ecotones they teach on during day-trips and overnight trips: 1) a riparian ecosystem, 2) native prairie ecosystem, 3) forest ecosystem, and 4) sacred and ceremonial sites. Through this program, they strive to be purposeful with being on the land, moving from simply 'being outside', to concepts of grounding teachings in place and space (Anonymous, July 7, 2021). Purposeful land education forces educators to think about sustainability beyond ecological terms to ask how identities and histories with the land have been constructed (Calderon 2014, 10).

Land-based education is a best practice for supporting the learning of Indigenous students because, as one interviewee described, in institutionalized education it is difficult for Indigenous high school students to 'feel useful', or have a sense of purpose, meaning,

² Here, the use of the word 'country' in the Australian context is interchangeable with 'the land' in the Canadian context.

belonging and hope in their lives – all of which are Indigenous-specific wellness indicators. Being on the land gives students an opportunity to connect with their culture and community (Xetólacw Community School, June 17, 2021). Moreover, connection to land, and having a sense of purpose and belonging, are recognized factors in supporting Indigenous well-being (Health Canada 2015).

Lastly, as articulated by one interviewee and Elder, it is crucial to understand that as long as you have a relationship to land, that *is* 'land-based' learning.

I think one of the misconceptions people have for a land-based program is that it has to happen outside. I mean, yes it does have to happen outside. But anywhere you are, you're on the land...it's about your relationship with the land. So, in my opinion, once you have that relationship, you're always doing land-based learning, whether you are sitting on a piece of cement, or whether you're out in the forest. (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021)

4.4.2 Culturally Safe Spaces

Culturally safe spaces are built environments, places, areas, groups, dialogues or bodies of work that positively and proactively acknowledge, accept, and are inclusive of the full spectrum of diversity of students. Trauma-informed strategies can build safety in the classroom through consistency, structure, compassion, and understanding. By ensuring safety, all students benefit from a safe and compassionate space needed to take emotional and intellectual risks when learning. While this should be a key consideration for all education systems – Indigenous-specific or otherwise – creating culturally-safe, trauma informed learning environments is key to the success of Indigenous students (Bell 2013).

Interviewees stressed the important aspect of their program is not so much 'setting up a program', rather it is about creating and maintaining these safe places, where learners are lifted up, Indigenous worldviews are promoted, and culture is celebrated. Excellent student feedback shows that this approach is a proven methodology for the Land and Language Based Learning Program (June 29, 2021). An elder and teacher with this program described how everyone who walks through the door sits in safe circle, where all that students share is considered sacred, and does not leave circle. In these safe spaces, students build trust and understanding, and in return, educators are able to provide help and support (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021). Educators from this program stressed the importance of creating culturally safe spaces, as

we need to create safe spaces for these cultural works to come out, when the cultural works have been in such - well as the news everyday reminds us, people tried to destroy them! So now that we're asking people to share them [cultural knowledge], and say "Well, we want to listen to you", there needs to be space, time, advocacy, right? That goes along with it. These voices have been [silenced] for a few generations now of time. (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021)

4.4.3 Community and Family-Supported Environments

In addition to creating culturally-safe spaces, involving the wider community and caregivers in learning environments – from classes, to activities and administration – was widespread across the schools interviewed. Most often, this takes the form of bringing Elders and Knowledge Keepers into learning spaces to share teachings, facilitate ceremonies, or co-lead education programs.

Eskasoni Immersion Schools acknowledges that knowledge does not just exist inside the walls of an institution. Because of this, they bring in trappers, hunters, and Elders into their school, or other community members, to teach and demonstrate cultural knowledge. Eskasoni Immersion's school board has a contact resource list of cultural experts they can call when they need to teach a particular lesson (Eskasoni Immersion School, July 5, 2021). Similarly, Deh Gáh Elementary and Secondary School, sənsisyustən House of Learning, and Xetólacw Community School, among others, bring Elders into schools to teach youth in the classroom or on the land. One interviewee explained as a semi-urban program, invited Elders or Knowledge Keepers may be from the territory, or from other Nations. The involvement of Elders and Knowledge Keepers is something to respectfully balance and consider in an urban context, or a context where learners may be from diverse nations (Anonymous, July 7, 2021).

In some programs such as TEA-supported schools in Saskatchewan, Elders and knowledge Keepers guide how students are taught and learn. For example, as explained in the following quote, TEA has a permanent Elders forum, and also holds regular meeting with teachers to receive their input.

We have like a literacy facilitator, and we have a numeracy facilitator, and then we have a youth advocate, and then a clan director. They each take a pocket of our programming, I guess, that they're in charge of, and then we do have a formalized Elders forum that all of those groups would draw into get community feedback from. We have regular meetings with our teachers as well, to get feedback from them. So it's organized into, we have like our early years consortium, and our middle years and our high school, and we meet with them on a regular basis to do PD (professional development), but also to get their feedback on how things are going...just like when we're developing our report cards for example. (Treaty Education Alliance, June 15, 2021)

Some schools also lean on a high degree of parental participation and involvement. At the Akwesasne Freedom School, parents have a lot of responsibility in running the school and in determining the path for children's education – this includes participating in everything from school maintenance, to developing learning content (Akwesasne Freedom School, June 16, 2021). Another example of parental involvement is The Salish School of Spokane (an immersion school), which requires parents to participate in 60 hours per year of language training. The school recognizes this is a high level of commitment; however, multiple interviewees stressed that language should not only be taught in schools, but has to be a part of home life as well. The Nêhiyâwiwin Cree Language and Culture Program also hosts language classes for parents in the evenings to bolster fluency throughout the family and community and assist their students in language acquisition (Salish School of Spokane, July 7, 2021; The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021).

Wider community supports, such as counselling and career planning, are another promising practice in establishing truly supportive learning environments for Indigenous students. These community supports create a 'wrap around' model and a supportive environment for students to thrive.

We're focusing on a mantra that says that, 'As educators, or anyone involved in the service of a student, that we are to accommodate, facilitate, motivate and collaborate, in order to ensure that there's a wrap around service for all of our children, that includes...the physical, the emotional, the mental, the spiritual.' Those are all components that we're looking to nurture in every student while keeping close connections to their supports, whether it be extended family, their parental unit...so that it's a more central working outwards... We're doing a more wrap around approach. (LETE, June 30, 2021).

Partnerships are essential to ensure that students are connected to supports and services that cross sectors (e.g., health and social services). Thus, it is a best course of action if Indigenous education programs work collaboratively and cooperatively to ensure that needed services are available. The Xeťólacw Community School has a behavioural support therapist, who also works in land-based education at their school.

We have two counsellors who can do clinical counselling and we've got ourselves an amazing behaviour therapist that really helps with our high risk kids, and he has been amazing in being able to build a relationship with the students and with their parents... and we have a spiritual, learning counselling in a spiritual way. So, we have both, you know, kinda the clinical and also more of a First Nations way of doing it. So, the behaviour therapist is very much involved in the 'land school' too. So, some of the high-risk students, that's the first place that they feel success in, is being down there. They might be building a wood shed, they might be cutting wood, they might be, you know, and they're having a good time, and they're good at it, and then that feeling carries forward in the other stuff that they're asked to do. So, we see big changes in those kids, with that work they've done. (Xeťólacw Community School, June 17, 2021)

Xetólacw cite their excellent counselling staff as key to building relationships and environments that support students (Xetólacw Community School, June 17, 2021). At the Clearwater River Dene School, allied health supports such as speech and language specialists, can be provided to the school through their tribal council, as needed (Clearwater River Dene School, June 29, 2021). There is a need for support for students within the school, by involving community and caregivers, and beyond the school walls, by connecting to existing community supports. Community-integrated education models create supportive environments where students can thrive.

4.5 EVALUATING AND MEASURING SUCCESS

4.5.1 Evaluations and Assessments

Standardized forms of education assessments for learners are formal assessments to measure a student's abilities against a statistical norm, typically a Euro-Western baseline, and are often

a requirement of provincial schools. Some of the interviewees explained that if they do complete standardized assessments, they also carry out specifically tailored methods of assessing Indigenous learners. The Salish School of Spokane's grade 1 to 8 students complete standardized testing in math and literacy twice per year. However, they interpret the results themselves, and conduct additional independent assessments on a monthly basis (Salish School of Spokane, July 7, 2021). Similarly, Xetólacw Community School employs a mix of inhouse and standardized assessments, including the Acadience Reading Assessment and B.C. provincial high school exams (Xetólacw Community School, June 17, 2021).

However, many noted that standardized testing is not effective, especially in immersion schools when standardized assessments measure the language acquisition of children who have been taught in an Indigenous language (Clearwater River Dene School, June 29, 2021). Thus, alternative forms of assessments are a best practice for supporting Indigenous learners since there is a recognized bias in using Euro-Western developmental norms for culturally diverse students (Philpott 2007; Gould 2008; Nelson-Barber and Trumbell 2007; Banks and Neisworth 1995). Moreover, standardized tests can misdiagnose Indigenous children as having learning disabilities due to inappropriate standard psychometric methods (Gould 2008, 650; Peltier 2011, 127). While 'alternative' assessments can take a variety of forms, in general they refer to evaluations that do not rely on standardized testing. 'Holistic' assessments refer to any alternative forms of assessment which consider the whole person, and the context in which they are learning.

Some schools such as Clearwater River explained that they adapt standardized assessments to be relevant to their classrooms, and to the Dene language. For example, the school independently adapted the Guided Reading and Common Words Assessments. The assessment is administered completely in Dene, based on language acquisition of the 100 most common Dene words. Teaching approaches are then re-evaluated based on students' outcomes (Clearwater River Dene School, June 29, 2021). TEA-affiliated schools use regular classroom assessments, based on continuous learner-feedback to support students. In particular, they implement the Response to Intervention (RTI) model to support all learners. RTI refers to approaches in early identification and support of students with potential learning and behaviour needs (Treaty Education Alliance, June 15, 2021). Xetólacw Community School also employs classroom assessments know as Classroom Assessment Techniques, or CAT. Xetólacw teachers are trained to pick learning outcomes for each grade, on a spectrum of 'must happen' to 'can happen'. Teachers have a chart of those outcomes, and then colour code learners' achievements. (Xetólacw Community School, June 17, 2021). Finally, oral assessments were mentioned as a best practice in the Australian Aboriginal context (Association of Independent Schools of Western Australia, June 28, 2021).

Adaptations and modifications of standard assessments are a best practice when standard assessments are not serving Indigenous-learners (e.g., the assessment only encompasses English language acquisition) and there is limited capacity to design Indigenous-specific assessments (e.g. when assessment tool development is time-intensive or expensive). However, where possible, assessments developed by and for Indigenous peoples are most suitable. Some authors see this as a fundamental aspect of Indigenous pedagogy as Indigenous-led assessments often encourage students to cooperate, rather than forcing them to compete against one another (Bell 2013).

Rather than modifying or modelling Euro-Western assessment tools, the Land and Language Based Program created an assessment with four criteria grounded in Coast Salish teachings: 1) are you present and prepared, 2) are you listening, 3) can you repeat the story back, and 4) can you identify your gifts and add them to the world? Students are encouraged to contemplate and answer these four questions throughout the program. Teachers also use these techniques in their report cards. The overall goal is to prevent students from being held back by colonial standards, or for western standards to encroach on their Coast Salish approach to education (Land and Language Based Program, Ladysmith Secondary School, June 29, 2021).

4.5.2 Indicators and Measures of Success

When undertaking assessments, there are many indicators which could measure how schools and students are performing. Again, it is crucial that community defines 'success', so the measure of success is culturally-relevant and appropriate. Furthermore, indicators should shift over time, geography, and context to be responsive to learners' needs in both the management of programs and schools as well as day-to-day teaching (see also Section 4.2). As a result, there are no standard measures of success across Indigenous schools. However, there is a growing acknowledgement for the need to move away from historically colonial and deficiency-focused indicators, to strengths-based, culturally-relevant indicators that reflect Indigenous worldviews.

Interviewees spoke to performance indicators for Indigenous schools, as well as indicators which measure the success of students. Positive relationships with current and past students are a positive indicator of school performance (LETE, June 30, 2021). In fact, the Akwesasne Freedom School described that graduates coming back to the school (to visit or to teach) is a measure of success (Akwesasne Freedom School, June 16, 2021). Another marker of success is general expansion and increased registration numbers. At the Nêhiyâwiwin Cree Language and Culture Program, there were originally only 5 Cree classrooms, and the remaining 11 classrooms were English. Five years later, the numbers have reversed with 11 Cree classrooms and 5 English classrooms (The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021).

As it relates to student performance, mainstream indicators are generally culturally irrelevant and too narrow to fully account for the realities of Indigenous students. Instead, Indigenousdriven indicators measure positive outcomes among Indigenous students to better understand what factors contribute to resilience. While one educator shared that ideally, they want all students to graduate and be ahead of provincial numbers, success for Xetólacw students is truly when

the students have the ability and skills in learning what they're interested in, that they know who they are, they know their territory and they have pride in it. That they know the Lil'wat way, and they can also function well in broader society, and have fluent language. That's the top of the success that we're aiming for. (Xetólacw Community School, June 17, 2021)

Thus, having a sense of belonging, identity, and self is a key indicator of student performance in Indigenous schools.

What we really want for our kids ... is to be able to answer those questions: 'who I am, where I come from, where I'm going, and why I'm going there'. Those are essential questions for us, those drive our programming. (Treaty Education Alliance, June 15, 2021)

Multiple interviewees stated that while they establish basic learning outcomes for their students, there is a critical focus on fostering identity and understanding who students are (LETE, June 30, 2021; The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021). At the Nêhiyâwiwin Cree Language and Culture Program, the first focus is teaching children who they are, and asking "what does it mean to be Cree?", as explained in the quote below.

Through Elders, talking with Elders and community members, [we decided] that we needed to teach the children about who they are. And so that is something that we do: we teach the children about who they are, what does it mean to be Nêhiyâw, a Cree person. And so that was always a starting point for us. So everything that we do in regards to culture is always done in that Cree way. (June 22, 2021)

Thus, for the Nêhiyâwiwin Cree Language and Culture Program, making sure students know who they are and where they come from is most crucial. Interviewees explained how this self-confidence and self-assurance will support students in their future endeavours (June 22, 2021). One interviewee shared a story which exemplifies this:

I've seen this, where the students now have this confidence in themselves, who they are as Cree children. There's a story that I'll tell you about a grade 8 student who left our building...that student went onto a high school. And that school, there was a very small number of Indigenous students. He was one of them. But he had the courage and also the confidence to go and ask the administrators of that high school and tell them, 'Can we create a drum group in this school?' Because that is what he was used to here...in fact that administrator phoned me, and also the teacher from that grade nine program, wanted to support this student, and I believe there was maybe about six of seven other boys that wanted to create that drum group, and that teacher said, 'I don't even know create this, I don't know how to support this.' But they contacted us, and then we supported them in creating this drum group for these boys. But that one student, who went to the administration and said 'You know, I don't see this here. Can we create this here?'. And for me, that's what I see, that's what I would want. That's what I want when I think about our students being successful, is knowing who they are and having that confidence in themselves. (The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021)

Student success can also mean that youth are simply happy and have found a path to doing something they enjoy, even if it is not necessarily a path to graduation (Clearwater River Dene School, June 29, 2021). To Clearwater River Dene School, success for their learners means achieving milestones such as showing up every day, and being generally happy and well. A focus on personal strength and growth was also highlighted as a key indicator by Listuguj Education, Training and Employment (LETE). They explained that measures of success are happiness, confidence, motivation, language, empathy, and ownership over learning (LETE, June 30, 2021). For AISWA, if their students are on the land, happy, and meaningfully involved in their community, that is a good outcome from education. Generally speaking, Indigenous

schools have identified strengths-based, Indigenous-driven indicators to measure the success of students, as defined by communities themselves.

4.6 BARRIERS AND CHALLENGES

While interviewees clearly recognized means to achieve success in Indigenous education programming as summarized above, they also elaborated on certain barriers or challenges faced by Indigenous schools and programs, which should be kept at the forefront when establishing an Indigenous academy, school or program.

4.6.1 Systemic Barriers

Multiple programs discussed struggles caused by systemic barriers, at both an administrative and organizational level, and at an individual level with their students. This includes challenges around discrimination in reporting requirements and funding. For example, The Land and Language Based Learning Program has to justify and defend their teaching approaches to the public school administration, and have struggled reconciling differing views between their program, and the mainstream high school where the program is run (The Land and Language Based Learning Program, Ladysmith Secondary School, June 29, 2021). Other interviewees also explained how First Nations communities are required to report more frequently and thoroughly due to the assumption that Indigenous programs are inadequate (Xetólacw Community School, June 17, 2021).

The lack of adequate, sustainable funding was described as a barrier. In Australia, continuous funding for language programs is an issue. Since the 1960s, there has been a focus on integrating language in schools, but it has ebbed and flowed with each government agenda. Interviewees described this as a clear gap in commitment to continuity in language programs (Association of Independent Schools of Western Australia, June 28, 2021). One federally-funded school interviewed for this research explained that funding discrepancies previously resulted in their teachers making 40% less than teachers in the public school system (LETE, June 30, 2021).

4.6.2 Lack of Continuity in Staffing

Multiple schools expressed challenges in hiring and retaining Indigenous teachers and EAs, notably those who are fluent in Indigenous languages (Akwesasne Freedom School, June 16, 2021; sənsisyustən House of Learning, June 1, 2021; Eskasoni Immersion School; Clearwater River Dene School, June 29, 2021; The Nêhiyâwiwin Cree Language and Culture Program, June 22, 2021). In some cases, only a few Elders hold the language in a community, and are already stretched thin in terms of how much support they can provide. There is much more pressure when the transmission of the language is dependent on only a few individuals. Therefore, many schools and programs have hired second-language speakers to deliver language programs. This is both a limitation, and a strength, since communities continue to pursue language revitalization efforts despite the barriers and challenges they face.

One school explained how they need further control of teacher education programs in order to fully steer Indigenous-led education programs in their community. While this is a current barrier, examples of promising practices are outlined in Section 4.1.1 (Clearwater River Dene

School, June 29, 2021). In addition to this, Indigenous communities and schools should have the self-determining capacity to define their own training and accreditation processes, and certify their educators in whichever way they see fit.

4.6.3 Post-Graduation Limitations

While educators are proud of what their programs achieve for learners, there is concern about what happens to Indigenous students after they graduate from these supportive, culturally-safe environments. Especially in regard to language learning and immersion, there may be limited opportunities for students to use their language outside of school, or to be employed in positions where they can use their language later in life (sənsisyustən House of Learning, June 1, 2021). There are also concerns around the transition to university settings for students. To address these concerns, the TEA is currently working with the University of Regina to establish a dual-credit system where grade 12 classes also count for a university credit (Treaty Education Alliance, June 15, 2021).

4.6.4 Lack of Cultural-Relevancy and Appropriateness

Many academies have developed alternative indicators of success beyond graduation rates (see Section 4.5). However, there are still challenges in observable learning gaps, where Indigenous students are achieving mainstream curriculum outcomes at lower rates than non-Indigenous students. One interviewee expressed that this can be traced back to curriculum that this not culturally-relevant or trauma-informed (Clearwater River Dene School, June 29, 2021).

Language loss in recent years was also expressed as a challenge, and educators observed that language is not being spoken at home as much as it used to be (Xetólacw Community School, June 17, 2021; Clearwater River Dene School, June 29, 2021). This has proved challenging for language programming because youth are reluctant to speak the language at school. For this reason, there needs to be support for, and from, the entire community to bring back language (Clearwater River Dene School, June 29, 2021).

4.6.5 Challenges in Establishing Home-to-School Connections

Lastly, while some programs such as Akwesasne Freedom School and The Nêhiyâwiwin Cree Language and Culture Program cited positive and strong relationships with caregivers, others such as Deh Gáh Elementary and Secondary School sometimes struggle to engage parents with school initiatives. This is particularly true for caregivers of older youth, as engaging learners themselves in institutional school-settings after the middle-school age is challenging in and of itself (Deh Gáh Elementary and Secondary School June 24, 2021). One interviewee also expressed that gaining the trust of caregivers can be a difficult process given the historical legacy of the residential school system.

5. RECOMMENDATIONS FOR MOVING FORWARD

Given the diversity of Indigenous education programs in Canada and internationally, there are a myriad of promising practices in methods of instruction and teaching, promoting supportive learning environments, establishing culturally-relevant curricular content, and evaluating success in culturally-appropriate ways.

Based on these findings, it is suggested that YFNED consider the following recommendations:

1. Develop Indigenous education programs to meet the needs and goals of community

First and foremost, interviewees suggested that any Indigenous education program should be designed by local Indigenous communities in order to meet the needs and address the priorities of those communities. Communities should be engaged and actively involved in determining what they want their children to learn, where they want their children to learn, and what their children's learning outcomes should be. Further, Indigenous students should also be engaged. Students' voices should be central to the process of program design and management. It is crucial to tap into what students are passionate about in order to encourage engagement and attendance in the program.

Thus, it is important to engage community early, in all aspects of program development. It is not sufficient to simply take a mainstream program and curriculum and 'Indigenize' it. As one interviewee shared, trying to establish an education program centred in Indigenous worldviews is challenging when an education program was not fundamentally designed for that purpose. Instead, building a program directly from community needs is a recommended course of action. Moreover, 'setting up a program' is very different from 'living it into being', as stated by one interviewee, and community engagement must persist throughout the programs' lifetime.

2. Involve Knowledge Keepers, Elders and cultural experts in all aspects of program development and delivery

One primary method in developing and delivering education programs that meet the needs of community is to meaningfully involve Knowledge Keepers, Elders, and other local experts in designing programming. This can help ensure that the curriculum is relevant to Indigenous learners and grounded in the specific community's cultural teachings. It is particularly important to meaningfully involve Elders and Knowledge Keepers in decision-making capacities.

In order to do this, it is important for community to identify the appropriate Elders and Knowledge Keepers. Interviewees suggested keeping a list of experts such as medicine keepers, storytellers, or language speakers – and to give this list as a resource to teachers so they can draw on these people for support.

3. Ground all aspects of a school or program in Indigenous culture and worldviews

When Indigenous cultures and worldviews are considered the foundation, the result of this conceptual shift will be education policies, strategies, and frameworks that are relevant to local community contexts; recognize the importance of identity and community; and value

Indigenous knowledges and approaches. While providing opportunities for cultural activities and initiatives is important, this recommendation extends beyond weaving culture into a curriculum or program, to ensuring it is the foundation of all aspects of the school or program.

For example, grounding schools and programs in culture ensures a strengths-based approach to education. Embracing a strengths-based perspective recognizes that all students, families and communities have strengths, resources and the ability to recover from adversity. This perspective replaces an emphasis on problems, vulnerabilities, and deficits, and instead promotes an education system which shifts attention from the prevention of specific problems to a more positive, holistic view on youth development.

4. Centre Indigenous pedagogies and methods of teaching

Indigenous pedagogy as a teaching methodology based on Indigenous values and philosophies is a valid system of knowledge and skill transfer which focuses on the development of a human being as a whole person. Thus, Indigenous pedagogy and methods of teachings must be central to educational practices in Indigenous schools and programs. This can include experiential learning, intergenerational learning, and place-based and landbased learning, among others. Indigenous pedagogies make education more relevant and accessible to Indigenous students and supports the development of well-rounded students.

5. Create Indigenous-specific curricular content to align with Indigenous knowledges and ways of knowing and being

Indigenous schools and academies should create Indigenous-specific curricular content in order to centre Indigenous ways of knowing and being. Moreover, multiple interviewees recommended that the best practice would be to incorporate 'Indigenous culture' holistically throughout curricula, including all classes, subjects, programs, and activities. For example, culture does not have to only be taught in a culture or language class but can be woven into subjects from mathematics to physical education. This centering of Indigeneity includes working beyond the realms of what is typically considered to be 'traditional Indigenous knowledge'.

6. Focus on language revitalization as a key means to incorporate Indigenous ways of knowing and being

As discussed in Section 4.2, many schools emphasized how integral teaching language is in their Indigenous education programs in order to transmit cultural knowledge, improve literacy, and foster a sense of identify and belonging. Language revitalization itself is the key to restoring culture, tradition, and identity for many communities. It is recommended that language be a core class for all students, and be integrated in other classes, activities, and initiatives.

Interviewees suggested that everybody needs to make a concerted effort, where each person in a school, and ideally in a community, does their part to work on language. For example, not only teaching language in school, but organizing language classes for parents, and establishing language nests, for example, should be pursued and supported by the wider community and Nation.

7. Create safe environments in and beyond the walls of the classroom

Indigenous schools and academies must be well-integrated within the broader community, creating safe environments in the school, home, and community. For example, a program should be connected to allied health supports, key stakeholder groups, or community services in order to provide students with the most support possible. Interviewees underscored the importance of having cultural staff in creating healthy learning environments, both in classrooms and on the land, as well as educators who work in culturally-safe ways. These are key areas YFNED can focus on in order to create safe learning environments in and beyond the typical remits of the classroom.

8. Train, hire, and retain community-based Indigenous educators

Indigenous education programs and schools should strive for circularity in their staffing by providing community members accessible opportunities to become certified educators, so that local Indigenous people are teaching Indigenous children in their own community. As discussed in Section 4.1.1, multiple schools have begun running their own Indigenous teacher programs in order to address any issues with lack of staff, and to maintain a program that is reflective of community relationships.

Some interviewees underscored the importance of providing support and professional training in order to build capacity and increase skills. This can include 'in-house' culturally-relevant teacher training, as well as cultural-safety training for non-Indigenous staff. Given the difficulty in hiring and retaining staff, particularly in remote areas, training opportunities are a key recommendation, for both current staff and potential future staff.

Finally, measures to support staff wellness are also crucial for staff retention. Since educators are often overworked, care must be taken to avoid burnout. It is suggested to strongly support and nurture teachers, educators and other staff so they can continue contributing to the quality of programming in ways that upholds their own health and wellness.

9. Measure success through holistic, flexible, and context-specific assessments or understandings of 'achievement'

It is suggested that when establishing an Indigenous education program, Indigenous-specific indicators for success should be identified. Success should be measured through context-specific assessments – particularly for independent schools and programs (e.g., if standardized assessments are not mandated) – where learning outcomes are assessed holistically, in ways which truly represent Indigenous understandings of 'achievement'. As mentioned in recommendation #1, the local community should identify these indicators of 'success'.

6. CONCLUSION

This report provides an environmental scan of existing Indigenous education programs or schools in Canada, the U.S., and Australia. Additionally, it reviews some of the current literature on culturally-relevant teaching approaches and methods as well as findings from other Indigenous education programming. From this research, a broad overview of the current state of Indigenous education is provided through the use of concrete examples and case studies, covering promising practices in program development, methods of instruction, learning environments, content and curriculum, and evaluation.

While the context and geography of each program varies greatly, interviewees underscored common promising practices which have enabled the success of their programs. These include involving community, caregivers, and Elders; centering Indigenous worldviews and relationships; using strengths-based approaches; creating safe spaces and environments for learning; creating culturally-specific curricular content; and grounding programs in culture, language, and Indigenous ways of knowing and doing.

Based on these findings it is recommended that in establishing Indigenous education programs in the Yukon, the YFNED should develop Indigenous education programs to meet the needs and goals of community; involve Knowledge Keepers, cultural experts, Elders, and caregivers in all aspects; ground all aspects of a school or program in Indigenous culture and worldviews; centre Indigenous pedagogies and methods of teaching; create Indigenous-specific curricular content to align with Indigenous ways of knowing and being; focus on language revitalization as a key means to incorporate Indigenous ways of knowing and being; extend safe environments beyond the walls of the classroom; train, hire, and retain community-based Indigenous educators; ; and measure success through holistic, flexible, and context-specific assessments.

These recommendations will support the systemic changes required to better meet the needs of Yukon First Nation students. As Papp (2020) describes,

[to] decolonize the classrooms, a transformative approach would include removing hierarchy, respecting alternative ways of knowing, introducing a new curriculum style that builds attachment and hope while providing curricula that are meaningful to the students by incorporating Indigenous knowledge and Indigenous pedagogy into the classroom. (Battiste, 2000, 2013; Battiste & Barman, 1995; Castagno & Brayboy, 2008; Kanu, 2011 as in Papp 2020, 28)

This sentiment was echoed by interviewees throughout this study: decolonial education models, frameworks and approaches engage the heart and spirit of all learners, and honours and embraces who they are as Indigenous peoples. This is key to the success of Indigenous learners.

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APPENDIX A: INTERVIEW GUIDE

YUKON FIRST NATION EDUCATION DIRECTORATE (YFNED)

Interview Guide for the Environmental Scan of Indigenous Educational Programs and Academies

1. Pre-Interview

Before formally beginning the interview, ensure the following has been completed:

- 1. Introductions
 - Introduce yourself and the research team, who you work for, who you were hired by, and who you report to.
- 2. Give the participant an overview of the project and goals of the research. Read the following:
 - The Yukon First Nation Education Directorate (YFNED) was launched in response to the need for First Nations leadership and involvement in education. YFNED is focused on capacity-building, systems and resource development, second-level educational program and service enhancement, and learner supports. YFNED advances First Nation decision-making and aspirations for greater control over education by providing technical support, research, advice, and advocating for First Nation student success.
 - This project (the Environmental Scan of Indigenous Educational Programs and Academies) aims to gather an understanding of existing Indigenous-focused education programs regionally, nationally, and internationally. The proposed work will support efforts towards designing Indigenous academies at the secondary school level in Yukon.
 - The purpose of this research is to support YFNED in their ongoing work and research towards identifying:
 - a) Alternative, Indigenous-led, or decolonized Indigenous education programs and academies;
 - **b)** Core components of Indigenous education programming content, curriculum, evaluation, and overall approach; and
 - c) Best practices for developing and implementing Indigenous-focused education programs that meet the needs of Indigenous students;
 - From this, Firelight will be preparing a report for YFNED that provides an environmental scan and status assessment with respect to the above listed focus areas.
- 3. Explain the outline of the interview process.
- •
- 4. Provide an opportunity for the participant to ask questions.

- Providing accurate answers to participants' questions is an important aspect of free, prior and informed consent.
- 5. Review the consent form.
 - Read the consent form aloud to the participant if requested.
 - Ask the participant if they have any questions.
 - Once the participant's questions have been answered, review the consent form before beginning the interview. For obtaining verbal consent, ensure that the audio recorders are on, read through the consent form, and have the participant provide their verbal consent for the recording.
 - If the participant does not provide recorded or written consent, **do not continue with the interview.**

2. Introduction

Read the text below with AUDIO RECORDERS ON at the start of each interview.

Today is [date]. We are interviewing [participant name] for the YFNED Indigenous Educational Programs Project. Thank you for your time today.

My name is [name] and my co-researcher is [name]. [Participant name] has provided verbal consent, and I have explained the purpose of the study and interview plan.

3. Background and Experience

- 1. What is your current position (including position title, affiliations, etc.)?
- •
- What is your experience and involvement in Indigenous education programs (past or current)?
 - a. \rightarrow Which location or community does this program serve?
 - b. \rightarrow What age groups does this program work with?
- 3. Can you tell us about how the Indigenous education program began?
 - a. \rightarrow What was the process, and who was involved?
 - b. \rightarrow Was it based on an existing model?
- 4. Can you tell us about the administration of the program? [prompts: staffing/HR]
 - a. \rightarrow Can you share anything with us about the funding model of the program?
 - b. \rightarrow Are there any funding barriers and challenges?

4. Core Components of Programs

Content and Curriculum

- 5. Is your program independent, or integrated with provincial/territorial curriculum requirements?
- 6. How was the program content and curriculum developed? [prompts: were Elders, leaders, community members or education specialists brought in to steer the program/curriculum development?]
- 7. Is culture integrated into the curriculum? If yes, how?
- 8. How are Indigenous cultures and histories brought in to make the content more meaningful?
- 9. Is any traditional Indigenous ecological or environmental knowledge taught in your program?
- 10. Does your program have language classes, or an immersion component?
- 11. Are there any other important or unique content taught in your program that we haven't discussed?

Methods of Teaching

- 12. Can you speak about the program's approach to teaching? [prompts: What are student-teacher relationships like? How is learning paced?]
- 13. What are the preferred teaching and assessment methods? [prompts: specific strategies or tools?]
 - a. \rightarrow Do these methods accommodate for different learners? If yes, how?
- 14. Does the program incorporate Indigenous ways of being (or "Indigenous pedagogy") in teaching? If yes, how?
- 15. Does the program offer mentorship or peer-to-peer support and learning?
- 16. How do you monitor and measure students' achievements? Do you use any specific assessment tools?

Learning Environments

- 17. Can you tell us about where your students learn? [prompts: in a classroom, in the community, on the land?]
- 18. Is your program tied to any wider community supports or programs?
 - a. \rightarrow Is your program integrated with any special needs or allied health supports?

Effectiveness

- 19. What does 'success' for your students and your program mean to you?
- 20. What are key quality indicators for effective Indigenous educational programs?

5. Trends and Best Practices

- 21. Are you aware of examples of *other* Indigenous education programs that are particular "bright spots" or success stories for Indigenous learners?
- 22. What can YFNED learn from these trends and best practices when looking to establish their own Indigenous academies in the Yukon?

6.Opportunities and Closure

- 23. Do you have further recommendations for who to speak to about this research?
 - a. → Are you familiar with any individuals, communities, or organizations who have developed or implemented innovative mathematics approaches and tools that are culturally relevant and/or tailored to Indigenous students?
- 24. Do you have any suggestions of literature, resources or tools we should explore?
- 25. Do you have any final comments you would like to share?

7.Conclusion

Thank you for taking the time to speak with us today to share your knowledge.

Read with audio recorders on after every session.

Today is [date]. We have just finished interviewing [participant name] for the YFNED Environmental Scan of Indigenous Educational Programs and Academies.

My name is [name]. Notes are recorded in/on [notebook/computer]. This interview has taken approximately [#] hours [#] minutes.

APPENDIX B: CONSENT FORM

I (name)	, on this day (complete date)
	, consent to participate in a key informant

interview regarding the Yukon First Nation Education Directorate (YFNED) Environmental Scan of Indigenous Educational Programs.

I understand that this study is being conducted by the YFNED, with the support of The Firelight Group. The purpose of this interview is to identify alternative, Indigenous-led or designed educational programs or academies. Additionally, this interview seeks to identify trends and best practices, and recommendations for the creation of Indigenous academies in the Yukon First Nation context supported by YFNED.

Participants will have the opportunity to review the notes and transcriptions from their interview in order to make additions or clarifications to collected information, if requested.

By signing below or verbally acknowledging the following, I indicate my understanding that:

- a) I consent to have my words and responses recorded via audio recorder and notes.
- b) I am free to NOT respond to questions that may be asked, and I am free to end the interview at any time.
- c) I will have the opportunity to review the information collected following this interview to make additions or clarifications to the information I provided, if I request to do so.
- d) I grant YFNED the right to use any intellectual property that I choose to share as a participant in the study, for purposes specific to the study and not beyond that. YFNED will ask for my consent for any additional use beyond those purposes.

For more information, please contact Lindsay Moore, YFNED Education Analyst at

Lindsay.moore@yfned.ca or 867.667.6962 ext. 105.

I would like my quotes included in reports:	🗌 yes	no
I am willing to have my name included in reports:	🗌 yes	🗌 no

Signature of participant/verify oral consent _____

APPENDIX C: DESCRIPTION OF PARTICIPATING SCHOOLS, PROGRAMS AND ORGANIZATIONS

Schools, programs and organizations interviewed for this study are briefly described below.

1. Akwesasne Freedom School, Hogansburg, New York, USA

Akwesasne Freedom School is a Mohawk cultural and language immersion school, offering fulltime programs for students in kindergarten to grade six. Akwesasne Freedom School was developed and is currently run by the Mohawk community members of Akwesasne First Nation explicitly to counteract the harms of colonial schools. All lessons are conducted in the Mohawk language and the curriculum centers the Mohawk creation story and cultural teachings.

2. Listuguj Education, Training and Employment (LETE) and Alaqsite'w Gitpu School, Listuguj, QC

Listuguj Education, Training and Employment (LETE) is a directorate within the Listuguj Mi'gmaq Government, Listuguj, QC. LETE's vision is: "siawinnui'sulti'gw, siawimegitelsulti'gw, Siawignu'tmasulti'gw." LETE's vision statement is a reminder that we (ginu) continue to speak our language, we (ginu) continue to take pride in who we are, we (ginu) continue to learn. Part of the LETE, the Alaqsite'w Gitpu School (AGS) is an elementary school that serves close to 300 students from K4 to Grade eight. AGS offers Mi'gmaw immersion, French and English language streams. The school's name means "the eagle will soar", which reflects the hope that students will reach their full potential and take pride in their identity, knowledge, history, and well-being *as Mi'gmaq*.

3. Association of Independent Schools of Western Australia (AISWA), Osborne Park, Western Australia

AlSWA is a non-profit organization which supports, represents, and promotes the interests of 155 Independent Schools in Western Australia. Since 2004 they have been running a Future Footprints programs in collaboration with Aboriginal Independent Schools. The Future Footprints program supports Aboriginal and Torres Strait Islander students who attend one of the 17 participating schools, with the primary goal of ensuring positive engagement in the education system, enhancing Indigenous students' sense of belonging, and providing students with the confidence, knowledge and skills to succeed in life. The program is based on an 'Aboriginal Family Model' which includes of peer support and leadership.

4. Clearwater River Dene School, Clearwater River, SK

Clearwater River Dene School offers full time education and programs for students from pre-Kindergarten to grade 12 from the Clearwater River First Nation. They are also members of the Meadow Lake Tribal Council, and work collaboratively with the Council as well as postsecondary institutions in order to provide Dene teacher training programming. Alongside standard academic curriculum (provincial curriculum) delivered in the school, Clearwater provides Denesuline language classes, as well as various cultural and on the land opportunities.

5. Deh Gáh Elementary and Secondary School, Fort Providence, NWT

Deh Gáh Elementary and Secondary School is managed by Deh Cho First Nation. Serving students from Kindergarten to grade 12 full time, Deh Gáh emphasizes the importance of Dehcho Dene Zahtie language and cultural knowledge embedded in the curriculum. The school offers "On the Land Initiatives" in which students embark on experiential learning programs outside the school based in Dene Kede - culturally centered education - and skills such as hunting and gathering. The school emphasizes spiral, relational, experiential, and holistic methodologies in every subject area.

6. Eskasoni Immersion School (Essissoqnikewey Siawa'sik-I'nuey Kina'matinewo'kuo'm), Eskasoni, NS

Eskasoni Immersion School is a Mi'kmaw language and cultural immersion program offered from Kindgergarten to grade four. In their language lessons, teachers use observational pedagogy and culturally centered delivery methods developed in the school. This includes employing song, poetry, and storytelling, to supplement language lessons.

7. Salish School of Spokane, Spokane WA, USA

The Salish School of Spokane is a private school that offers immersion programs in Interior Salish dialects through a unique model known as a fluency transfer system. Programming is offered to a wide range of ages from Kindergarten to grade 12, accepting Indigenous and non-Indigenous students alike. In addition to language immersion programs, the Salish School offers assistance in curriculum development and training for language teachers in other First Nations.

8. sənsisyustən House of Learning, Westbank, BC

sənsisyustən Housing of Learning is a highly flexible, learner-centred private school offering full time elementary school programming for a diverse cohort of Indigenous students on and off reserve, as well as non-Indigenous students. Their curriculum integrates sylix cultural teachings with standard academic programming (provincial curriculum), supplemented with land based learning. Okanagan language and culture is taught in every grade.

9. The Land and Language Based Learning Program, Ladysmith Secondary School, BC

The Land and Language Based Learning Program operates inside Ladysmith Secondary school (a local public high school), providing culturally relevant education and language instruction in Hul'qumi'num. The program is taught by Elders from Stz'uminus and Snuneymuxw First Nation and centers orality and relationship building in its delivery. Outcomes, evaluation, and measures of success are rooted in Coast Salish values of reciprocity, and accountability, emphasizing the relationship of students to the rest of their class and community.

10. The Nêhiyâwiwin Cree Language and Culture Program, wâhkôhtowin School Saskatoon, SK

Wâhkôhtowin School is a Saskatoon public school which offers the province's only bilingual, bicultural, education in English and Plains Cree to Indigenous and non-Indigenous pre-Kindergarten to grade eight students. Cree ceremonies and cultural teachings are integrated as a core part of the curriculum, including activities such as attending evemts, feasts, smudges and powwows, learning appropriate protocol with Elders, and learning traditional games with the assistance of a Knowledge-Keeper and a Cultural Teacher. Anyone is open to join the program and free transportation is provided.

11. Treaty Education Alliance (TEA) and Learning the Land Program, SK

The Treaty Education Alliance provides educational programs and services, as well as technical advisory support, to their affiliated, on-reserve schools in Treaty 4 territory. Their mission is to nurture all students to be "Nation-builders" within their own communities, based in learner-confidence and inherent Treaty rights. While the day-to-day operations (e.g., curriculum or assessment) depend on each school, TEA provides resources when needed to guide Indigenous-centred learning. TEA also manages various programs and partnerships including a Learning the Land Program in partnership with organizations such as Outward Bound and the Nature Conservancy.

12. Xetólacw Community School, Lil'wat Nation, BC

Xetólacw Community School offers full time education to approximately 240 students from Kindergarten to grade 12. It provides cultural education alongside standardized (provincial) academic curriculum, as well as a Lil'wat language immersion program.

13. Anonymous

The detailed information of one program has been redacted due to their requested anonymity within the scope of this research. Generally, this program operates within a public school division and holds land-based learning activities and trips for Indigenous and non-Indigenous students of all ages. Programming is responsive to teachers' needs, and may be day field trips, overnight camps, and generally centre on environmental learning grounded in Indigenous knowledge.

Additional Leading Institutions

Additional schools, programs and institutions were highlighted by interviewees, including:

- Onion Lake Cree Immersion Program, SK
- o Dene Kede Curriculum, NWT
- o Shepherdson College NT, Elcho Island, Australia
- o Clearwater River Dene School
- o Gubalanya School, Australia